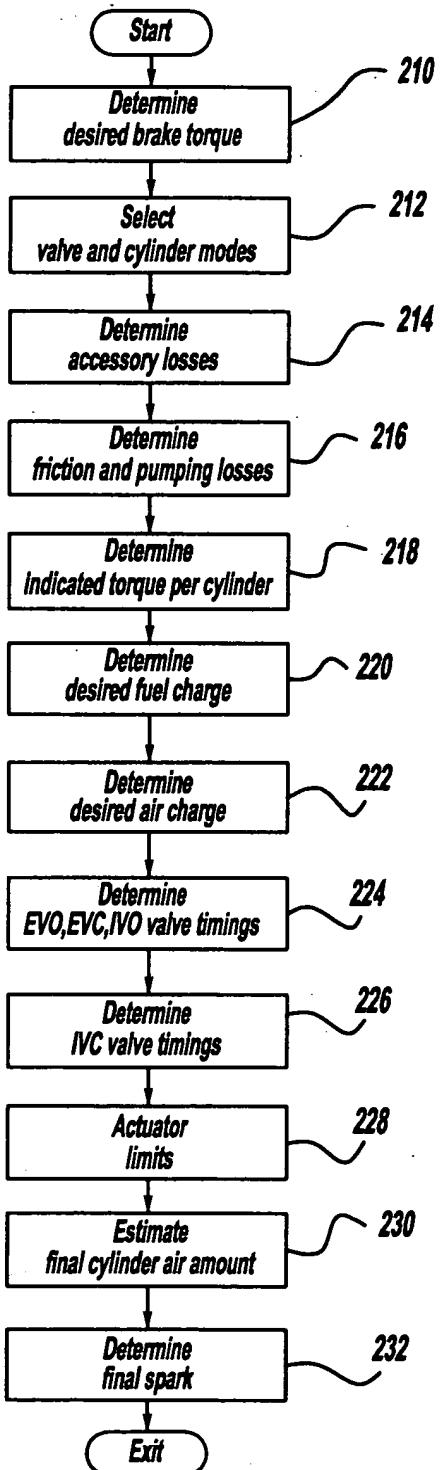
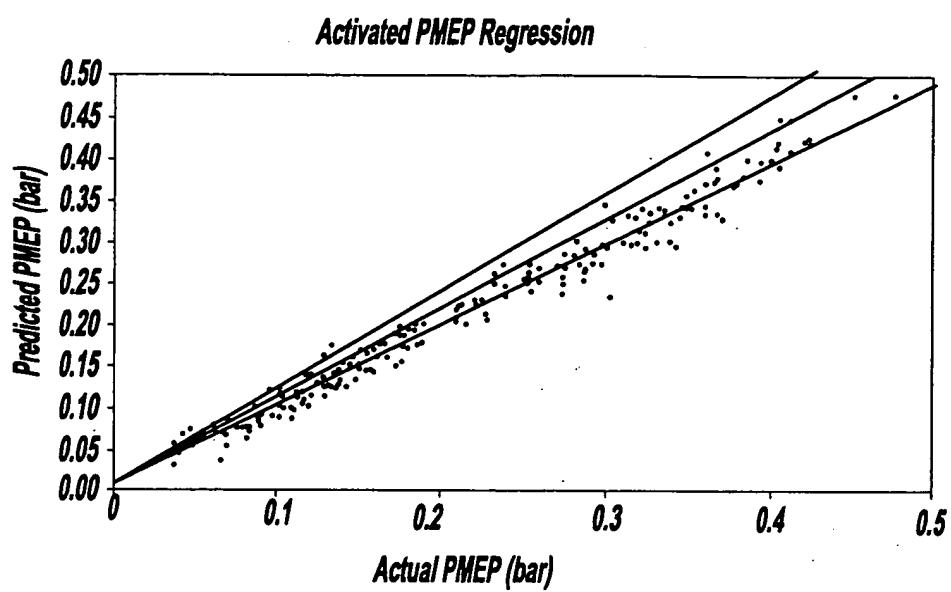
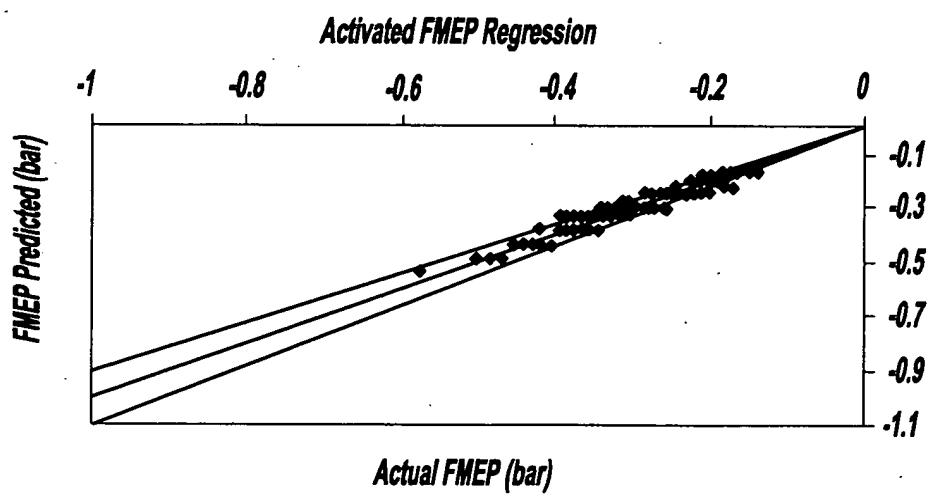
**FIG-1**

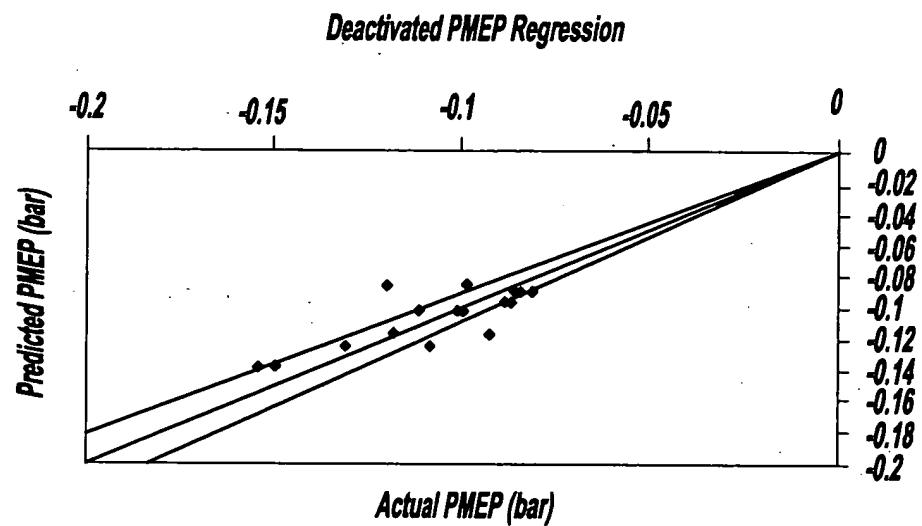
**FIG - 2**



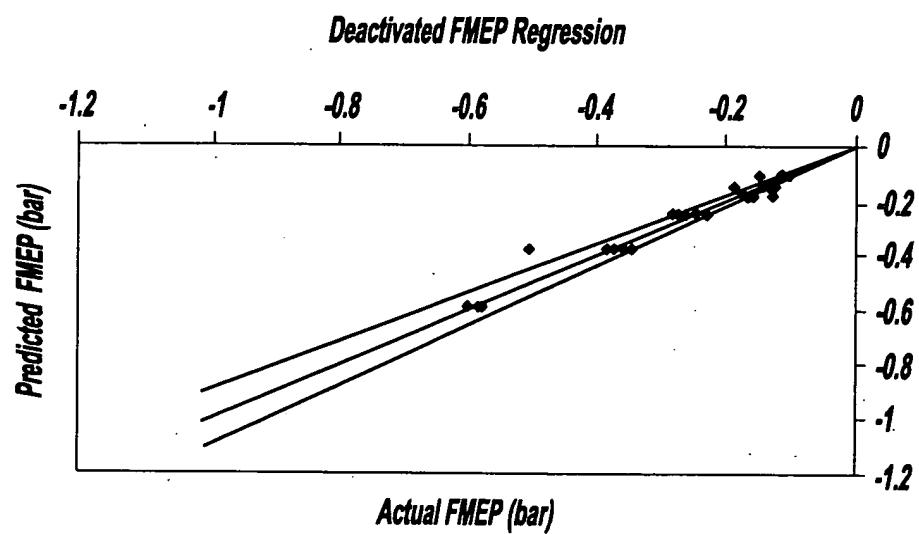
**FIG - 3**



**FIG - 4**



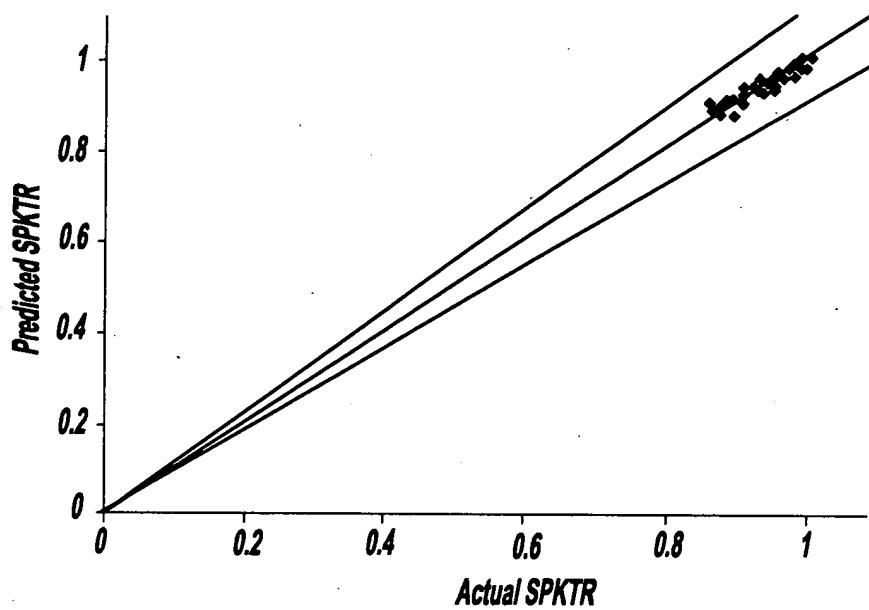
**FIG - 5**



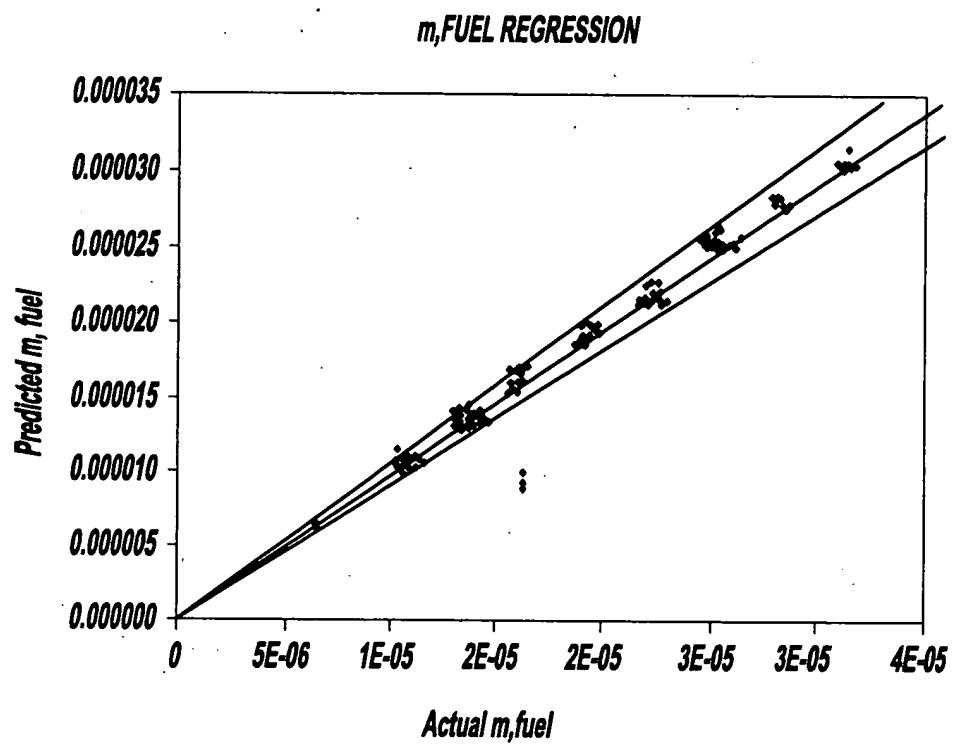
**FIG - 6**

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*Spark Retard Torque Reduction Regression*

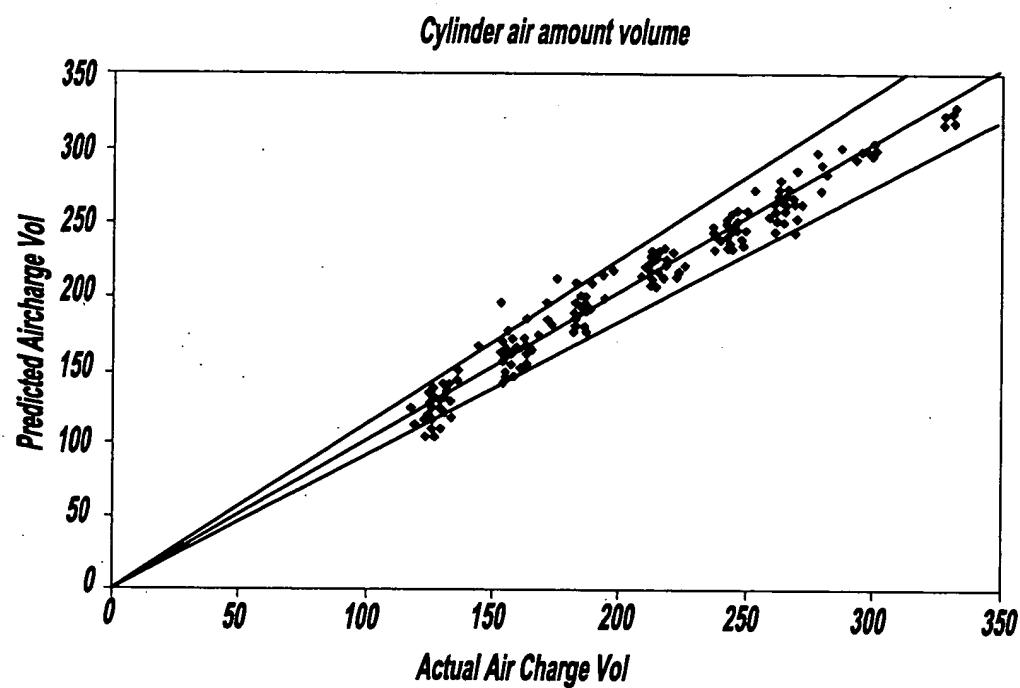


**FIG - 7**

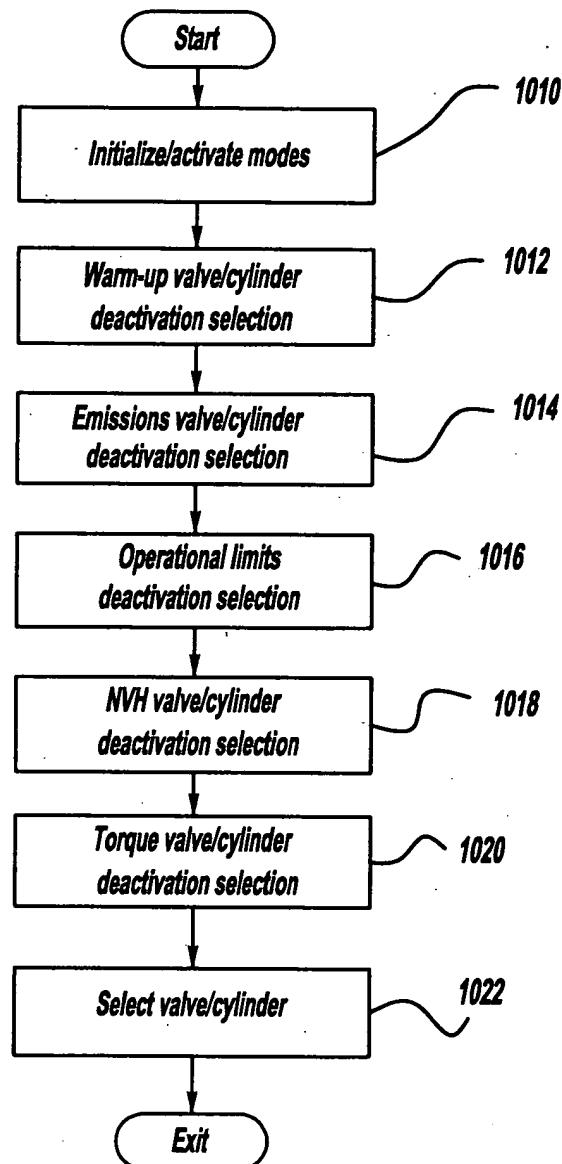


**FIG - 8**

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**FIG - 9**



**FIG - 10**

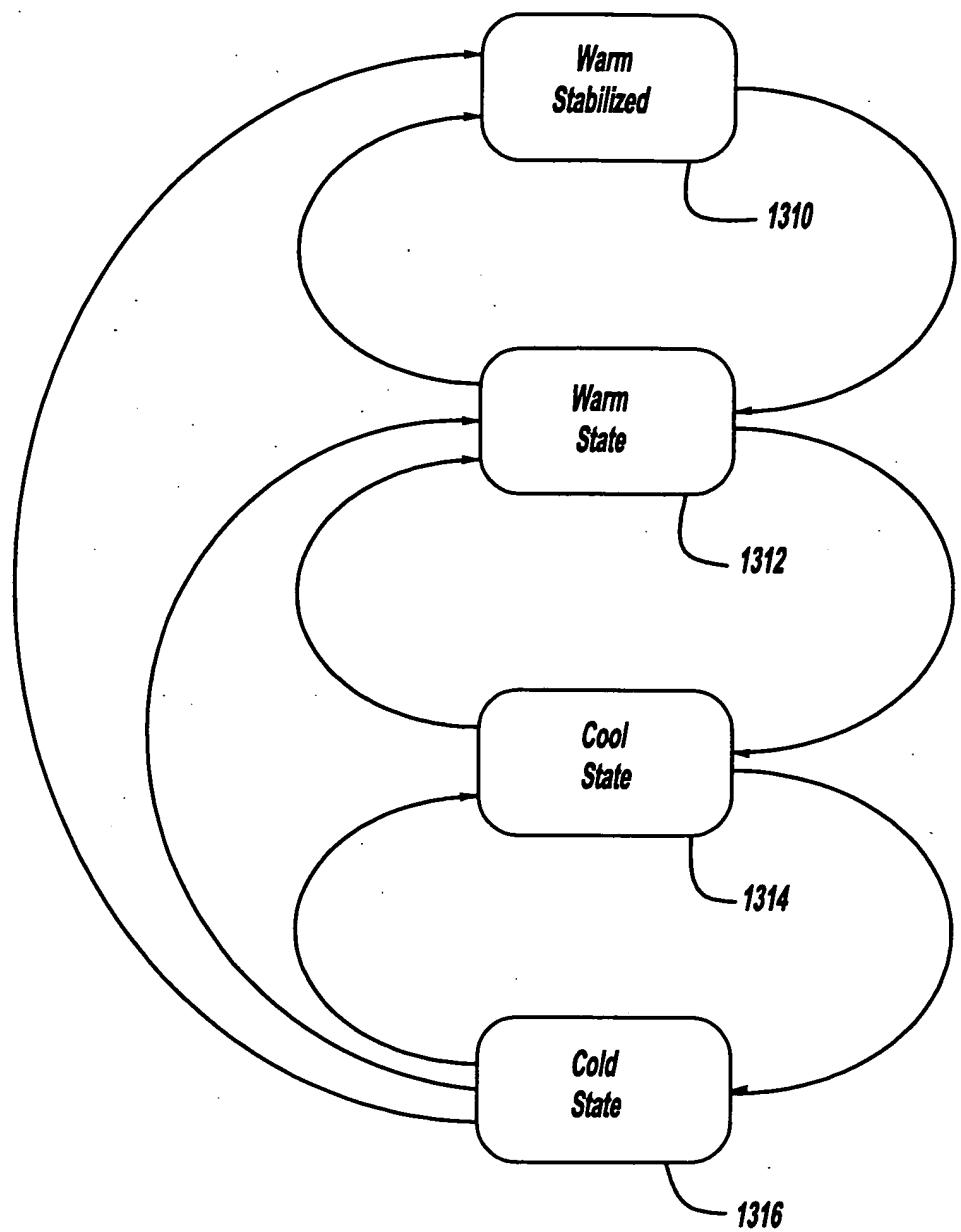
	COLUMN 0	COLUMN 3		
V2	1	1	1	1
12-STROKE	1	1	1	1
V4	1	1	1	1
V8	1	1	1	1
DECREASING TORQUE →				
DIDE      DIAE      AIDE      AIAE				

**FIG - 11**

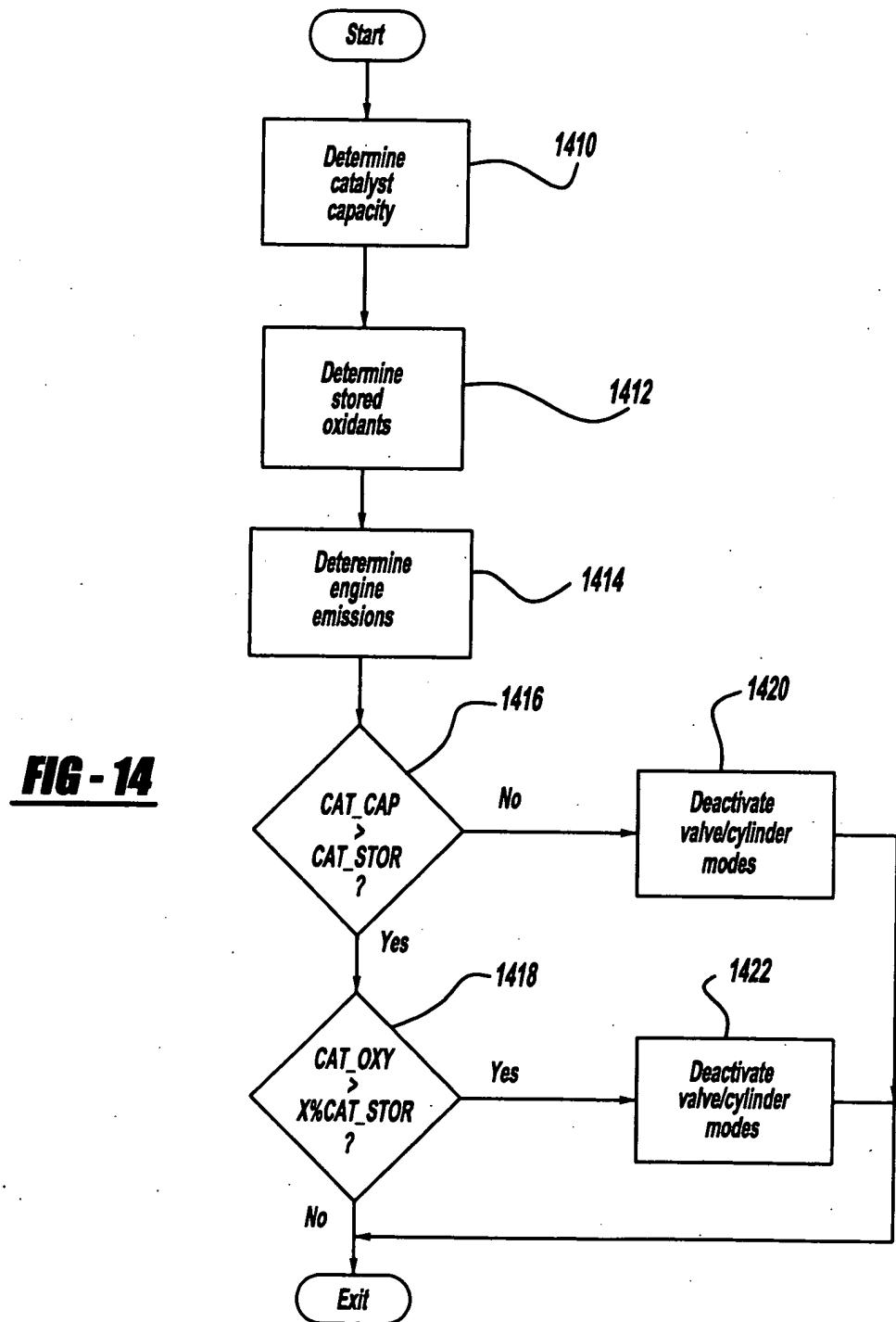
	COLUMN 0	COLUMN 3		
V2	0	0	0	0
12-STROKE	0	0	0	0
V4	1	1	0	0
V8	1	1	1	1
DECREASING TORQUE →				
DIDE      DIAE      AIDE      AIAE				

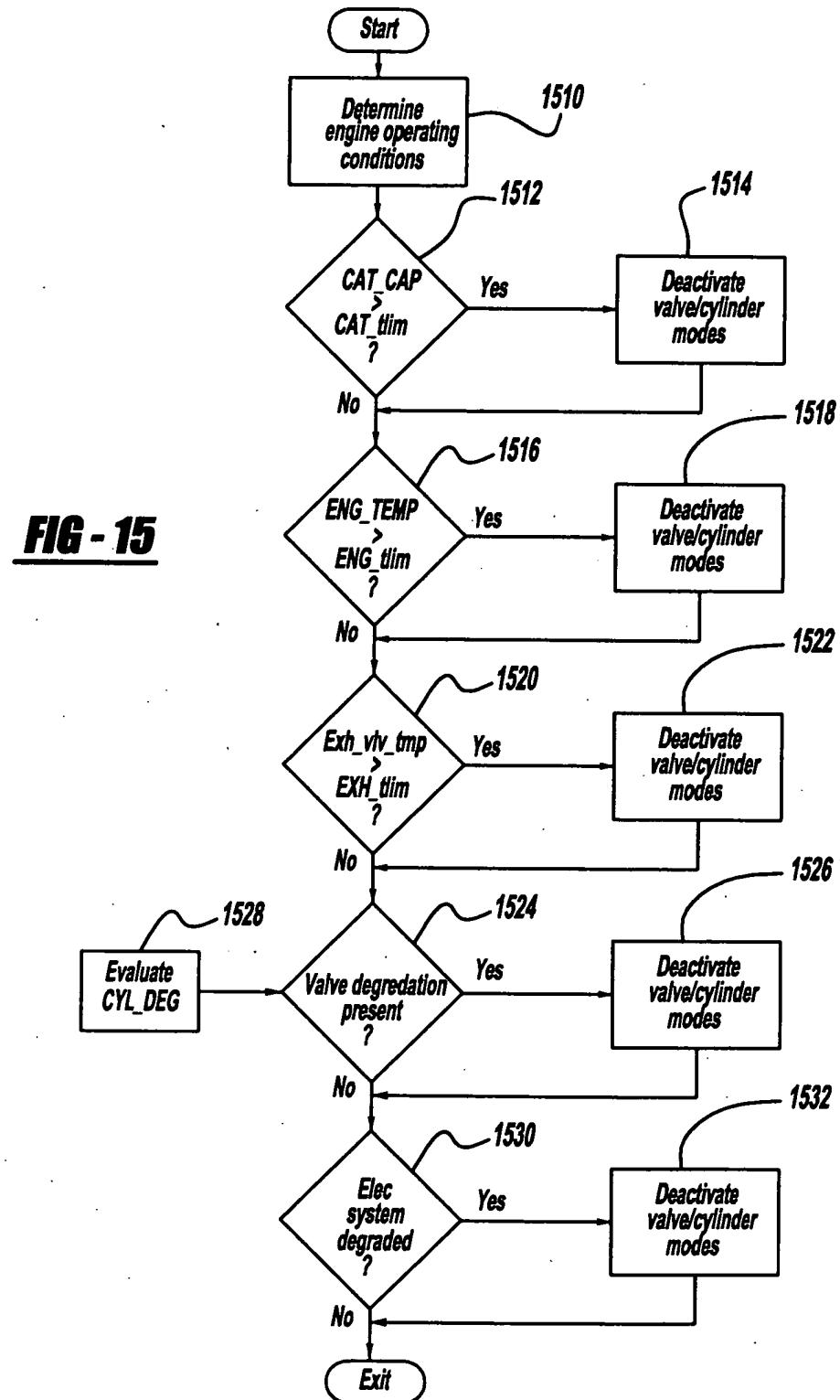
**FIG - 12**

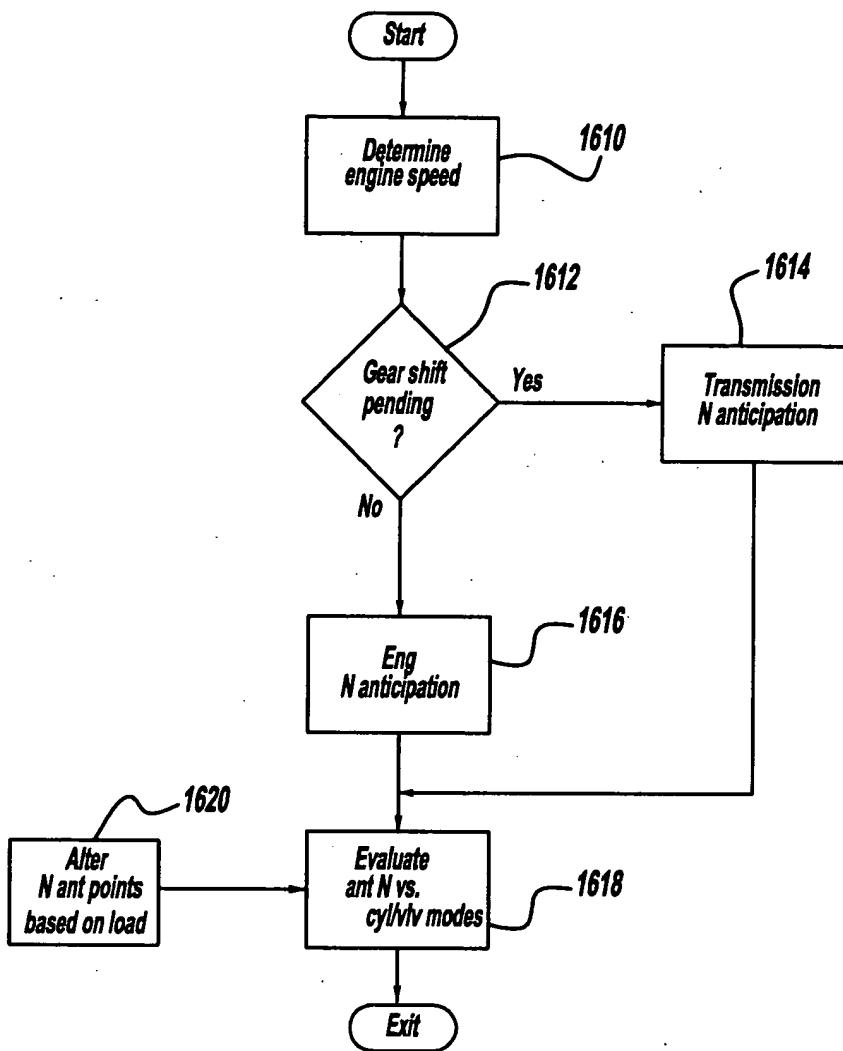
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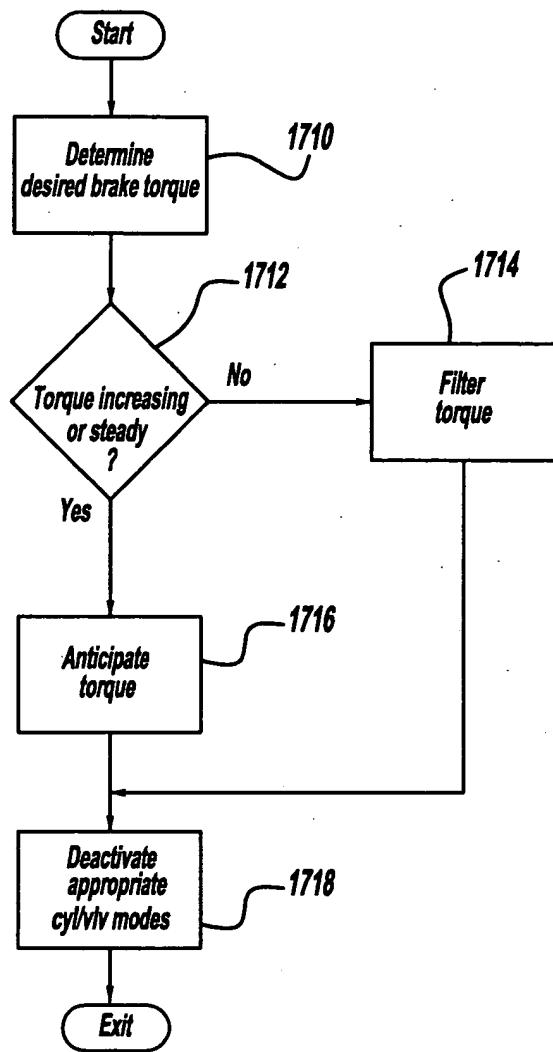


**FIG - 13**

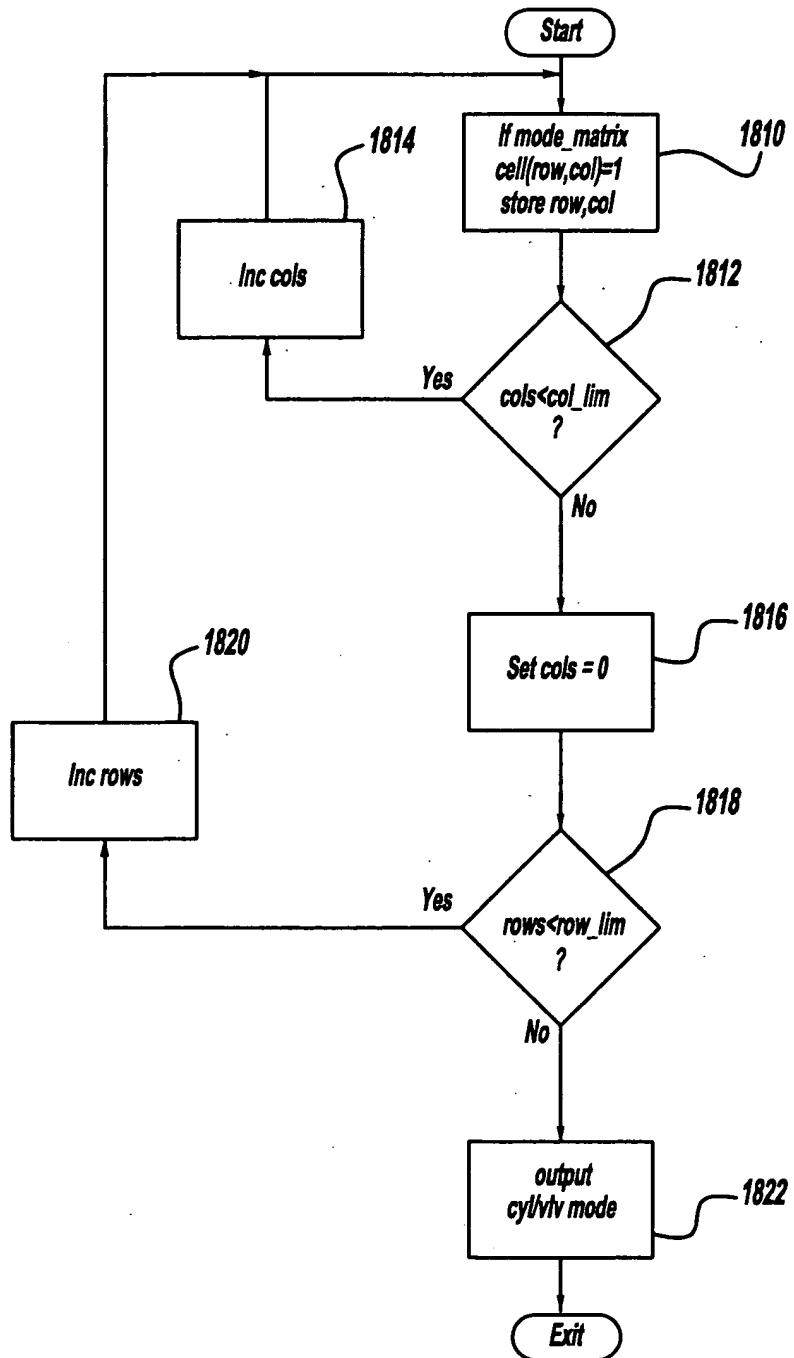


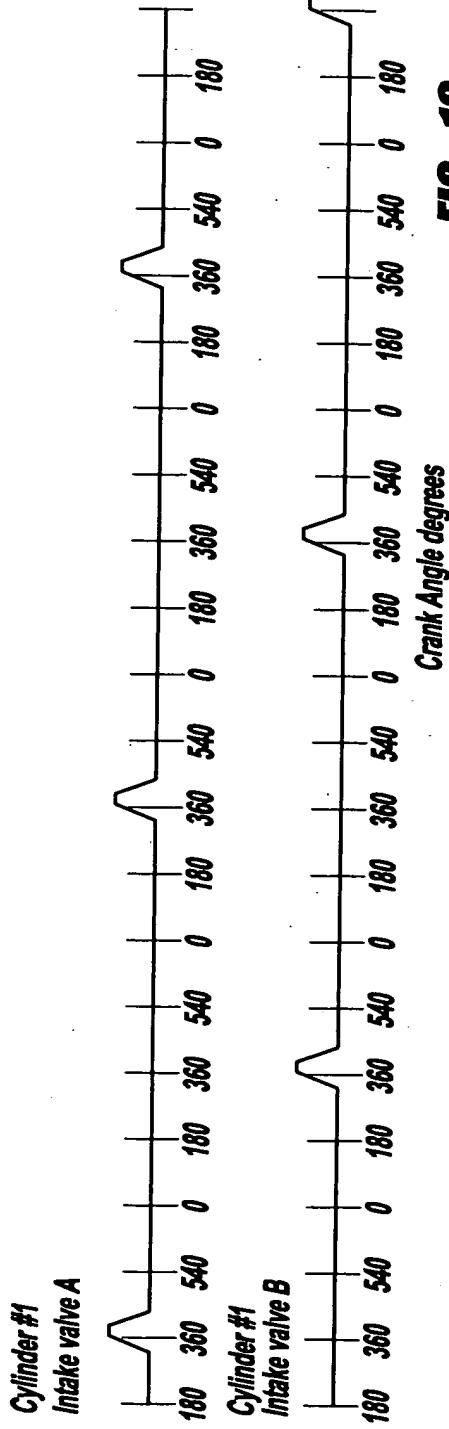


**FIG - 16**

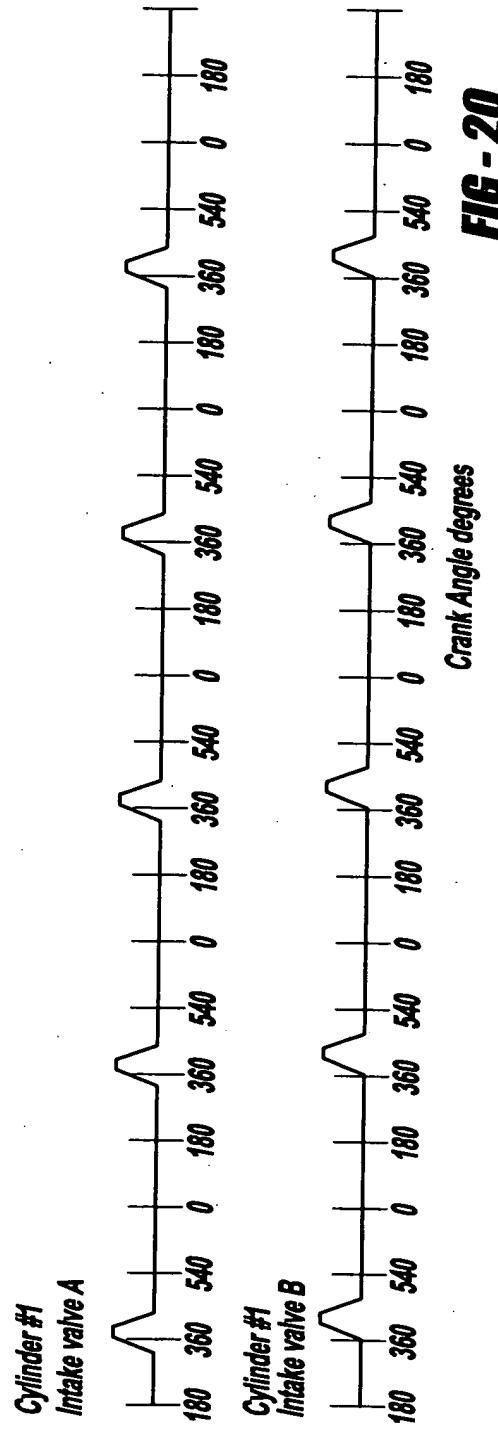


**FIG - 17**

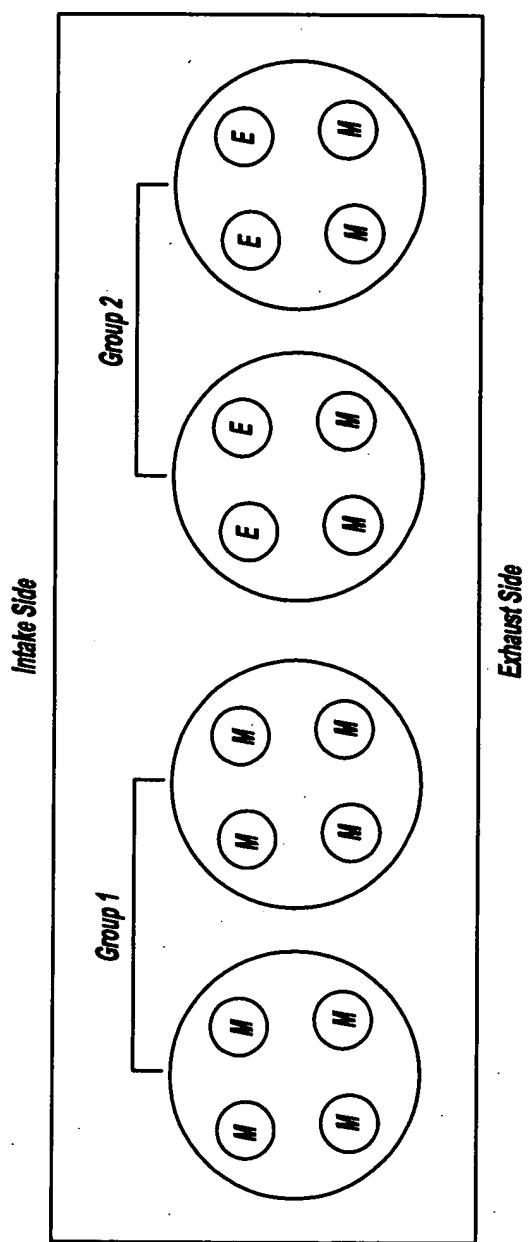
**FIG - 18**



**FIG - 19**



**FIG - 20**



**Fig - 21**

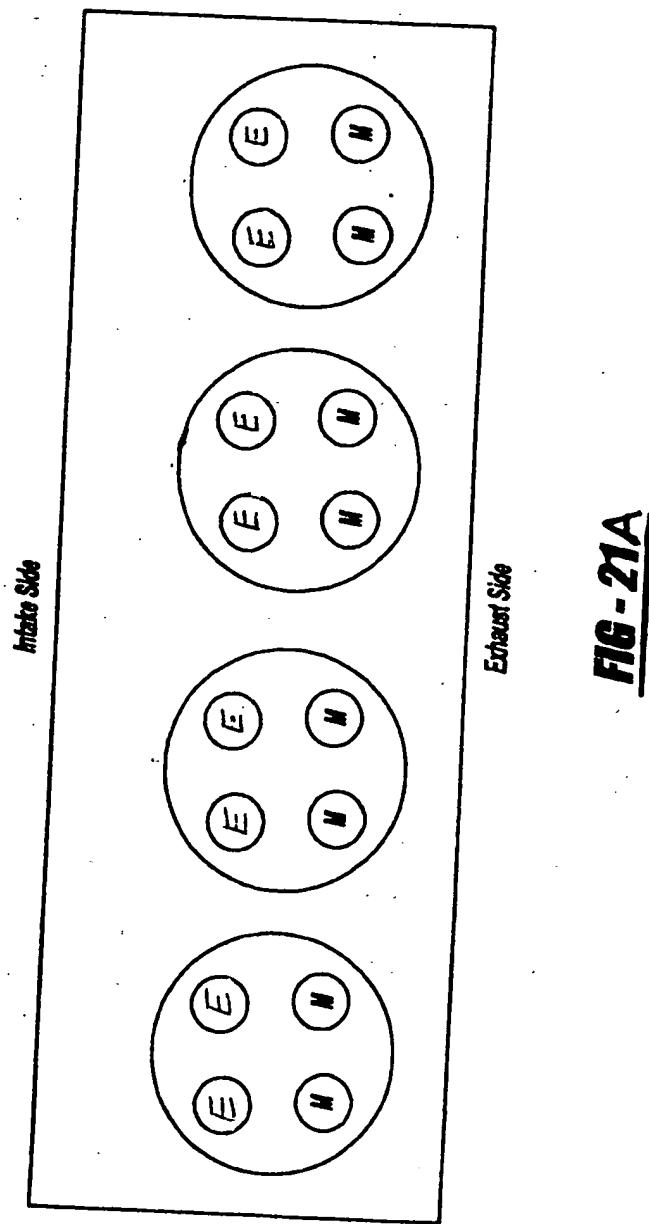
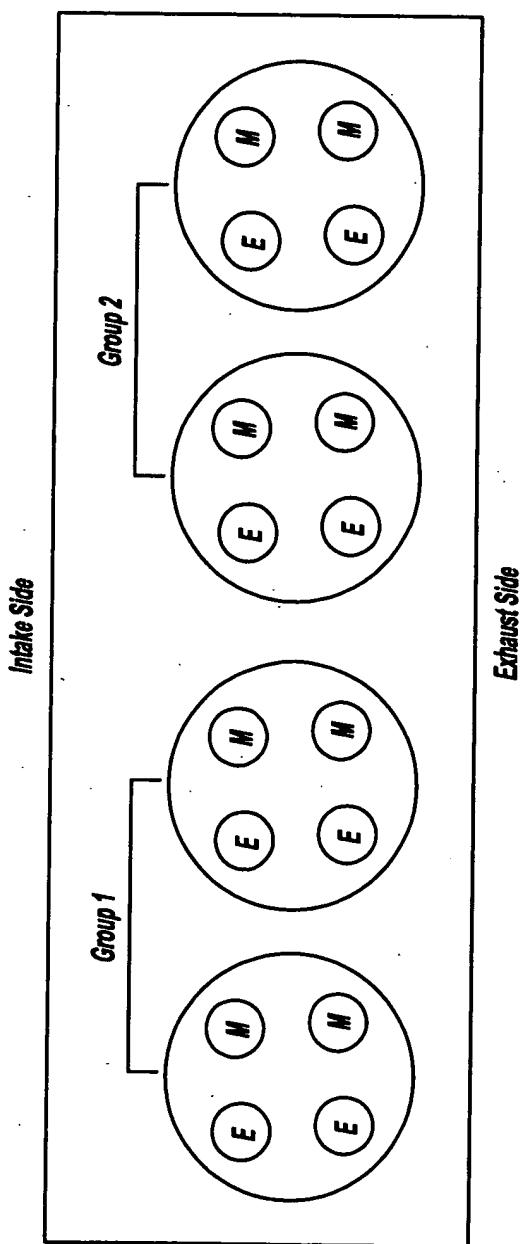
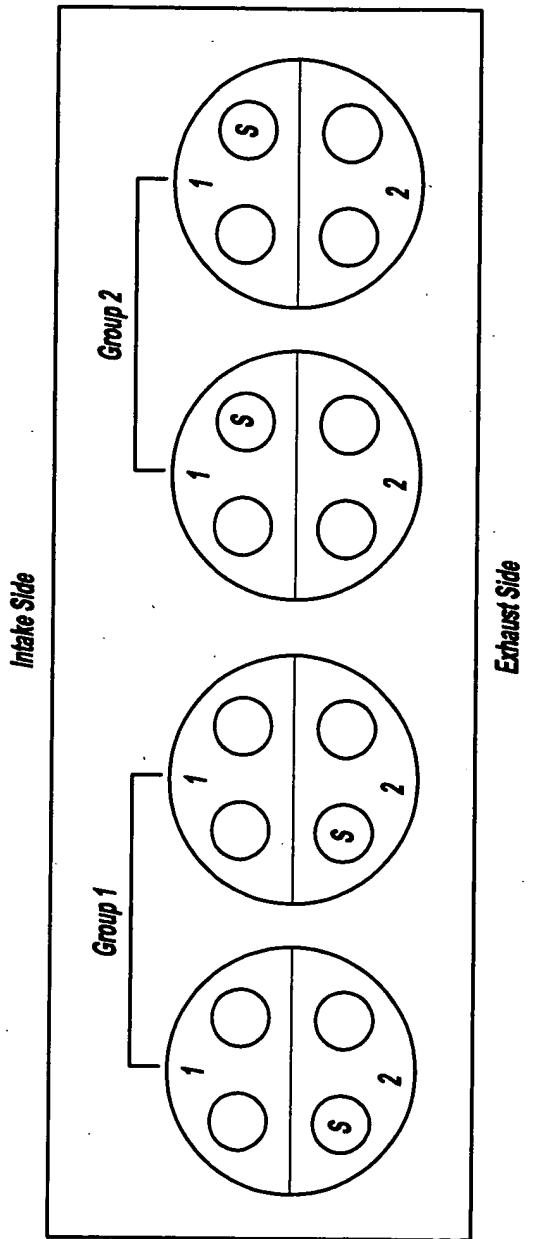


FIG - 21A

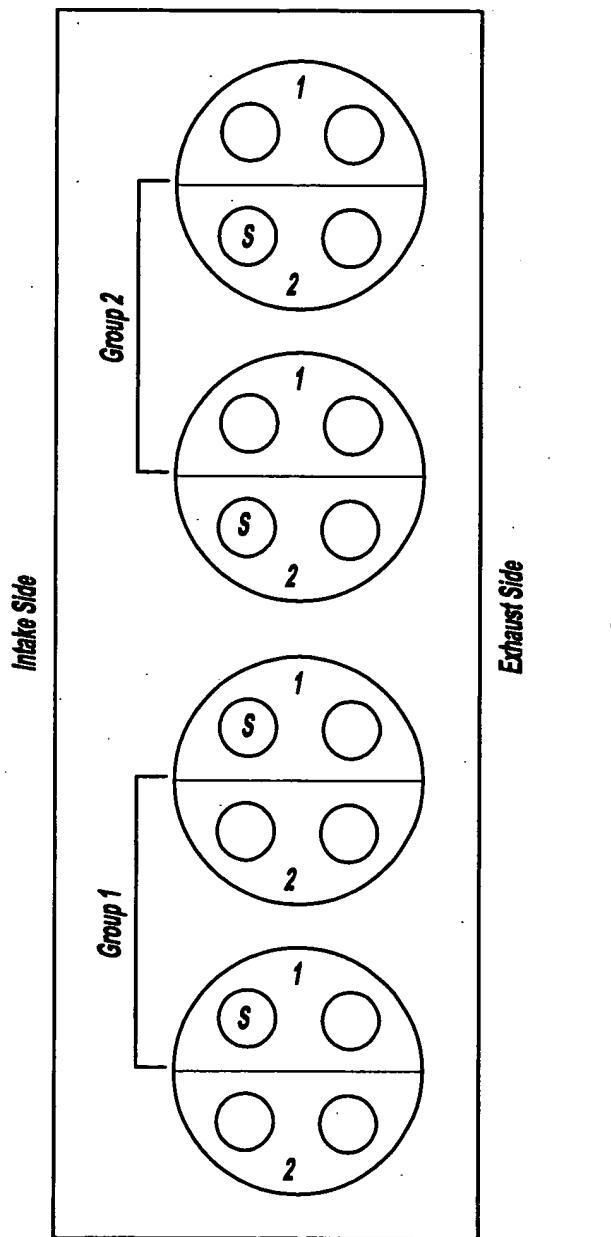


**FIG - 22**

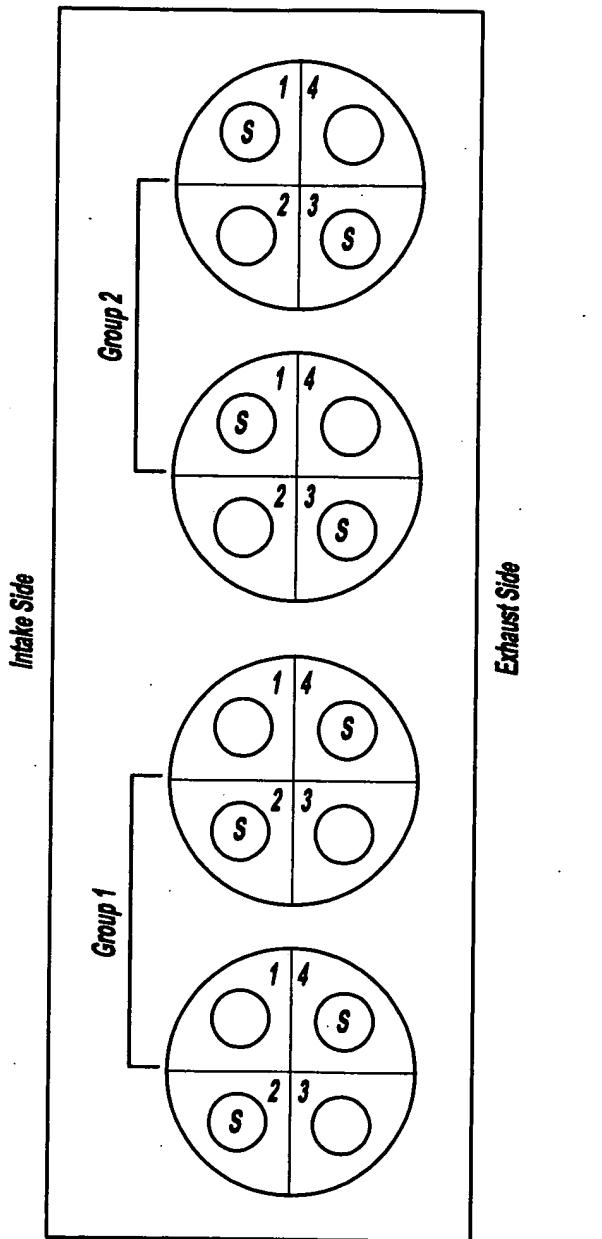
20/60



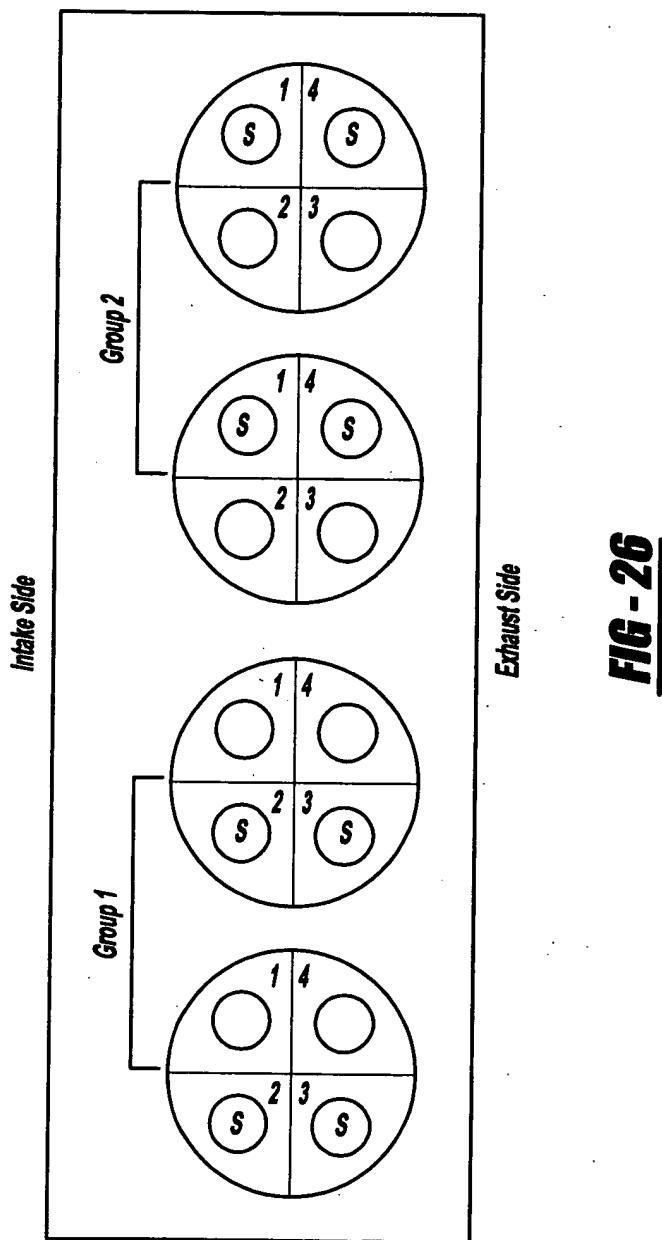
**FIG - 23**



**FIG 24**

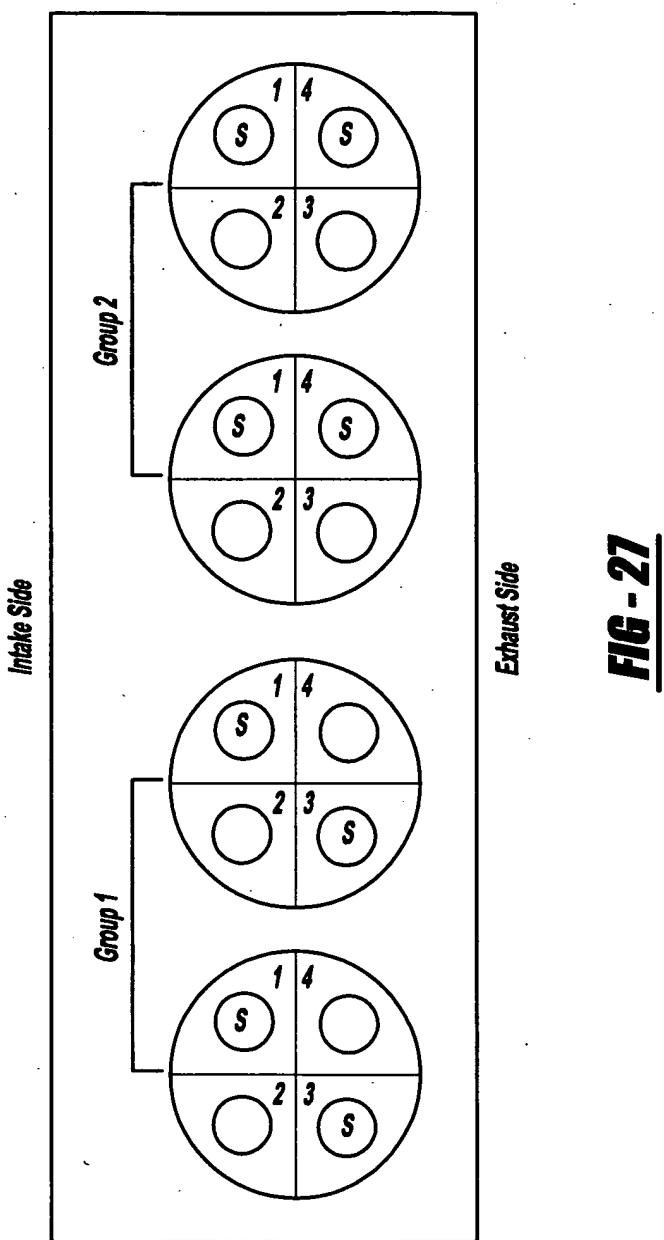


**FIG - 25**



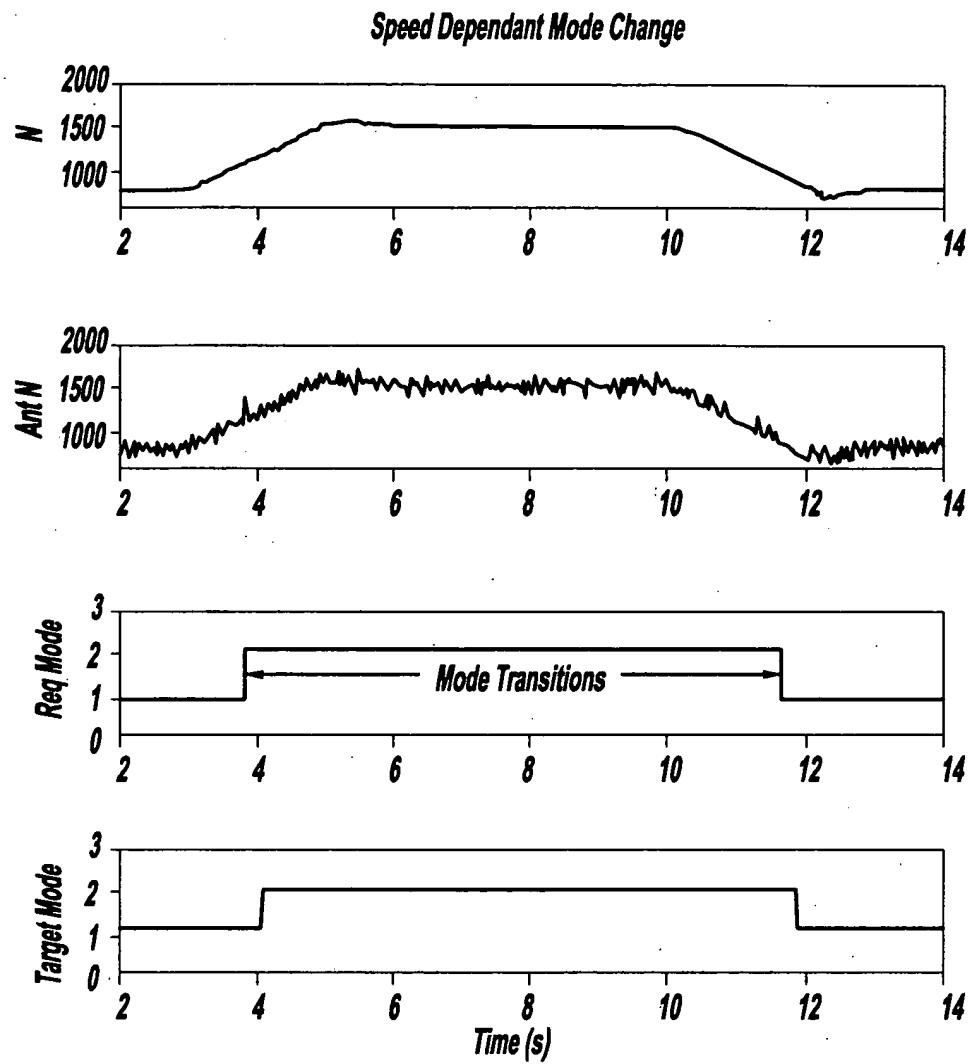
**FIG - 26**

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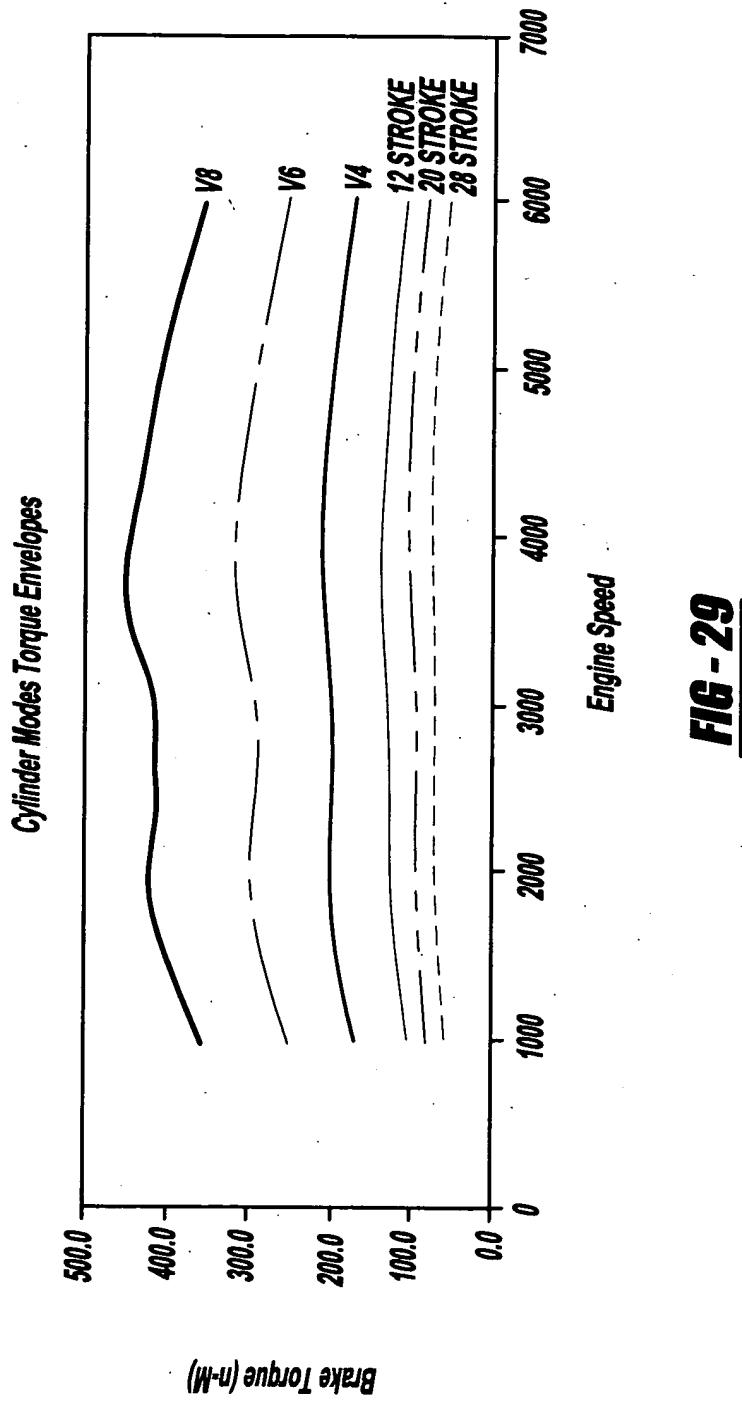


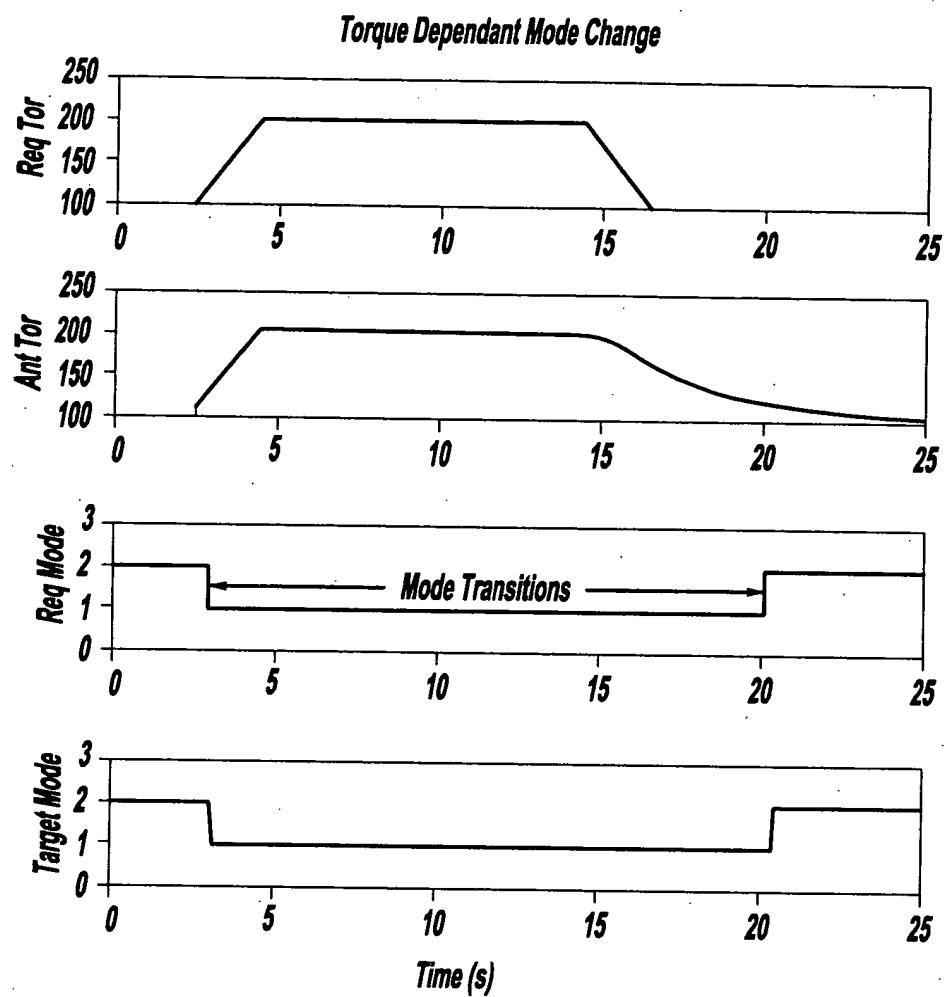
**FIG - 27**

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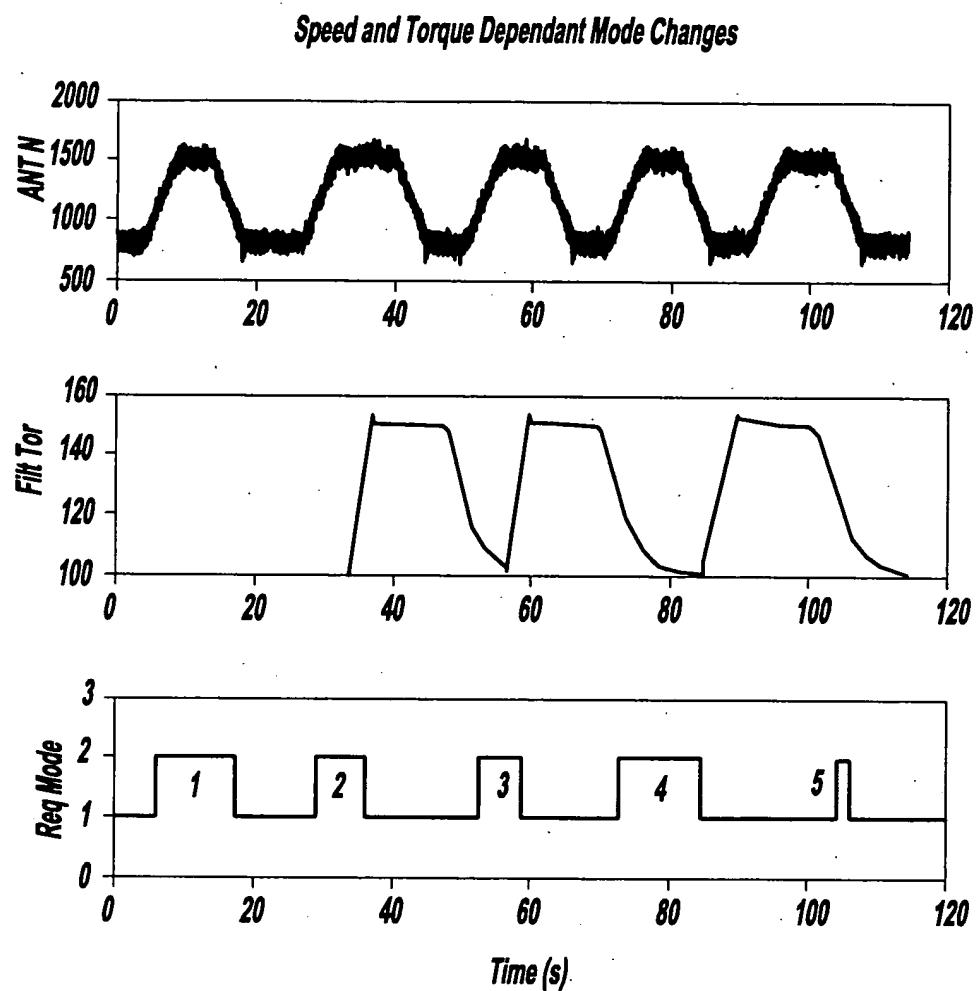


**FIG - 28**

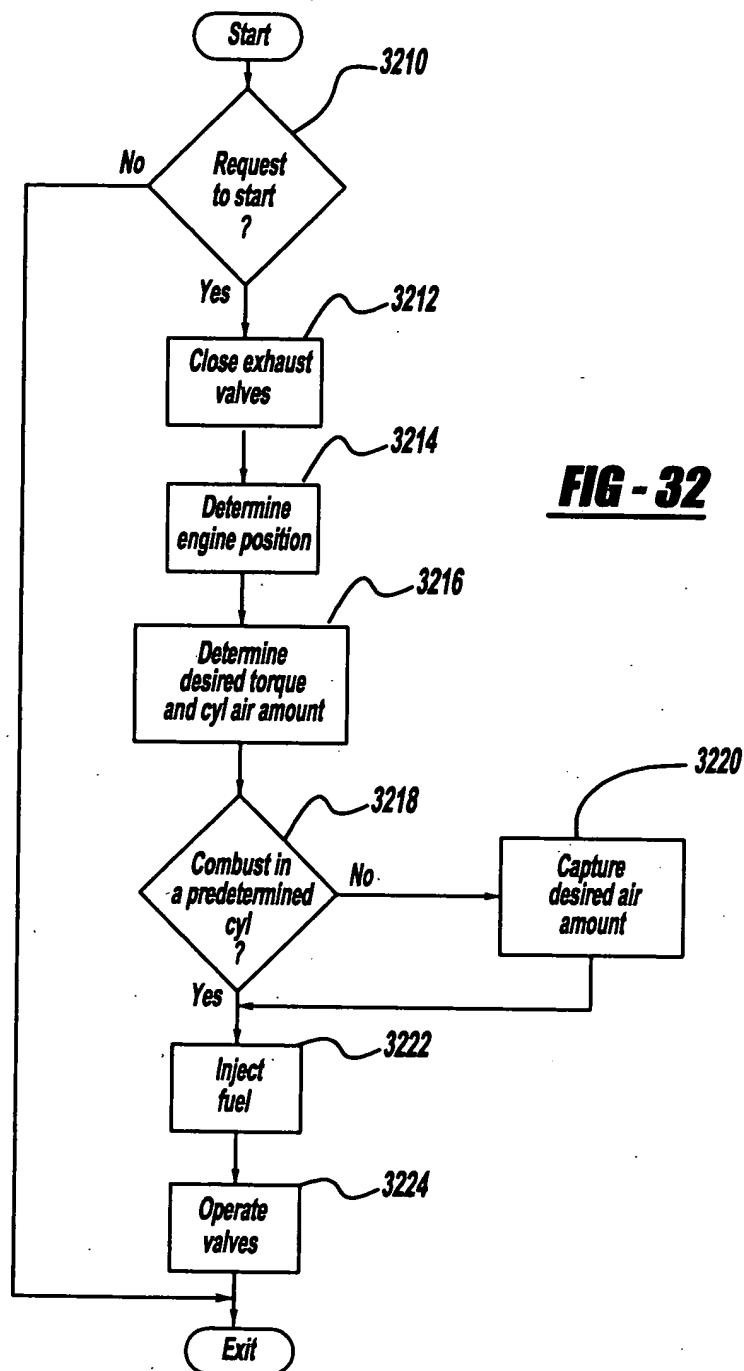


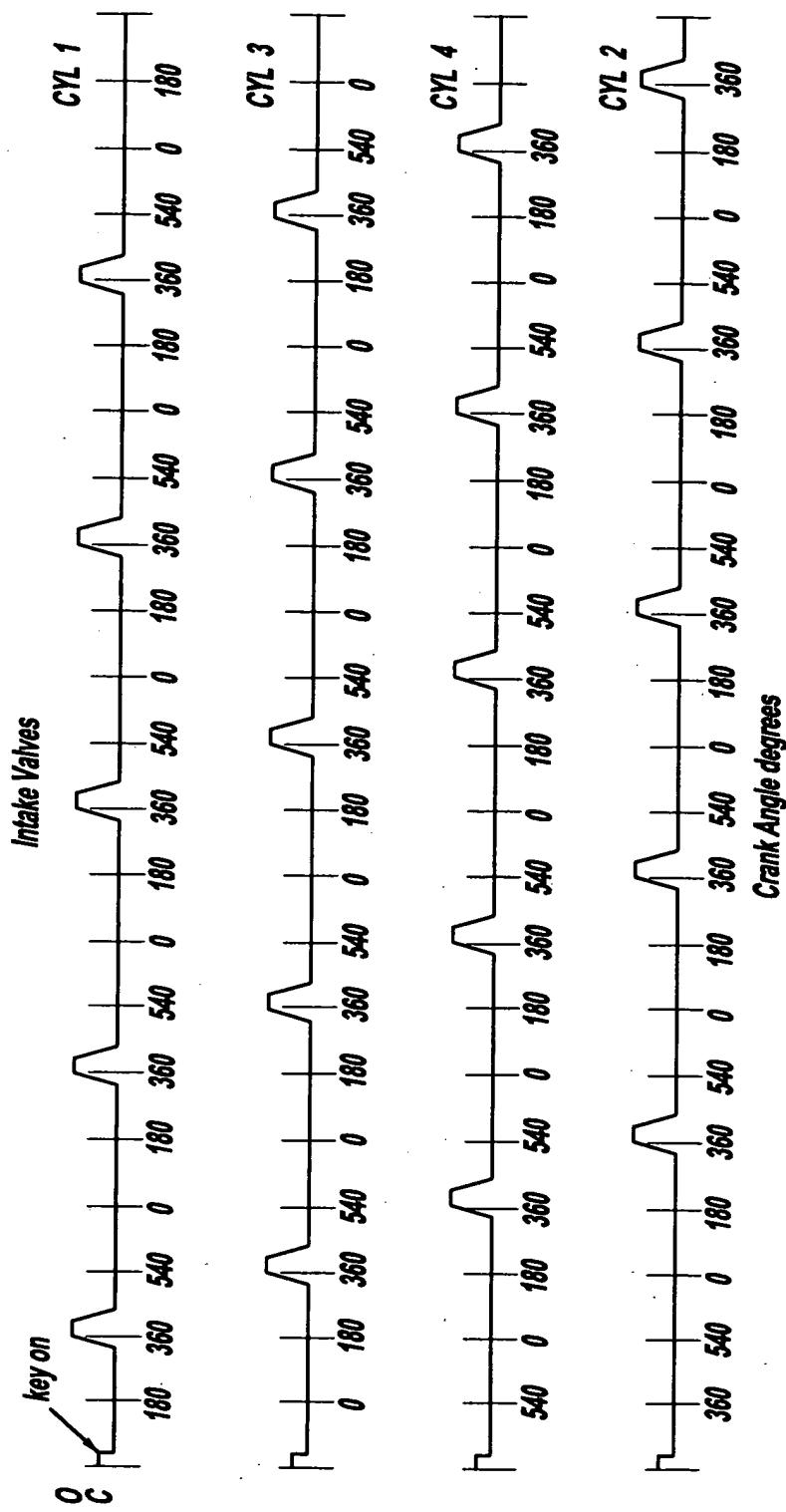


**FIG - 30**



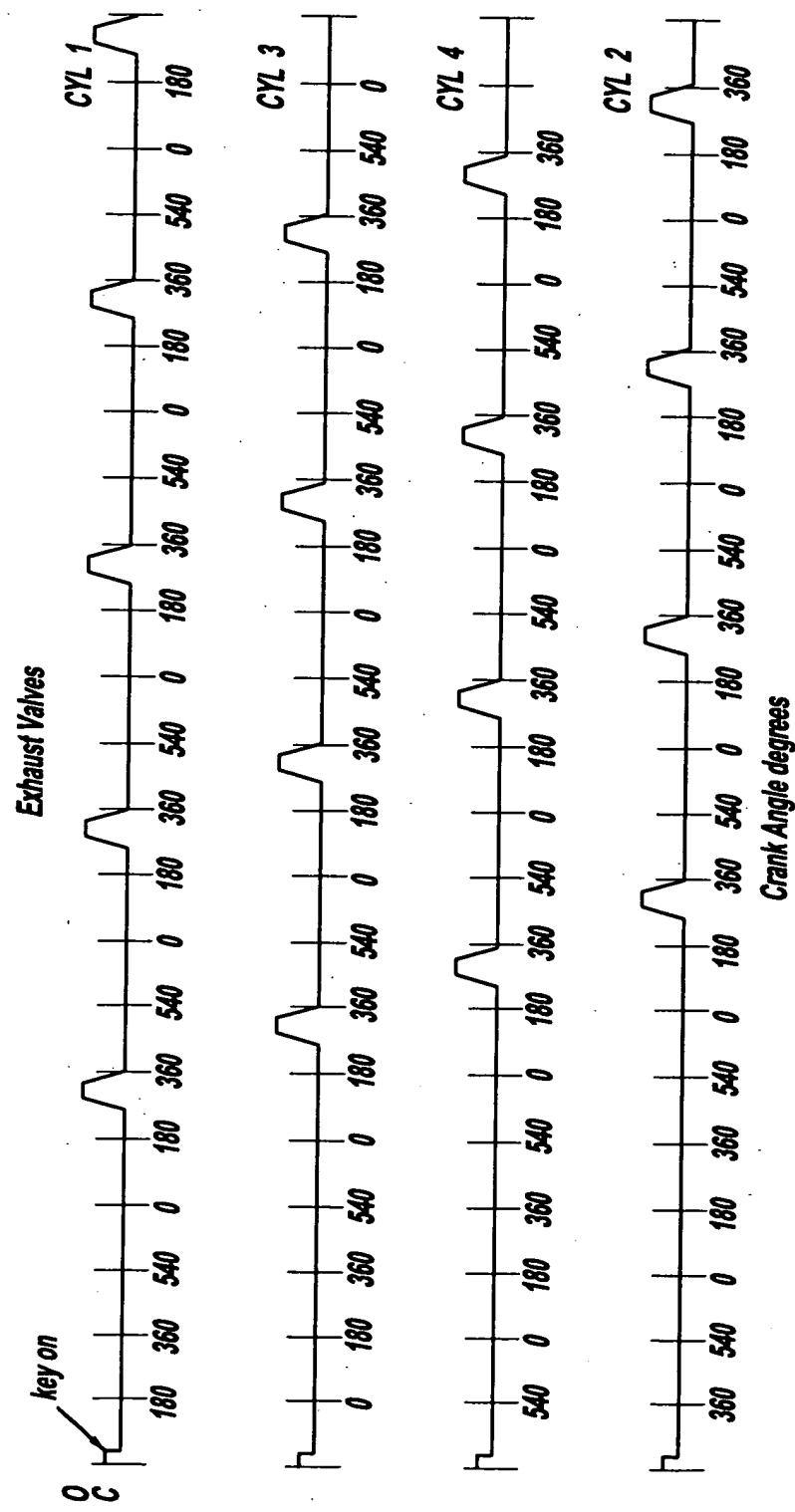
**FIG - 31**





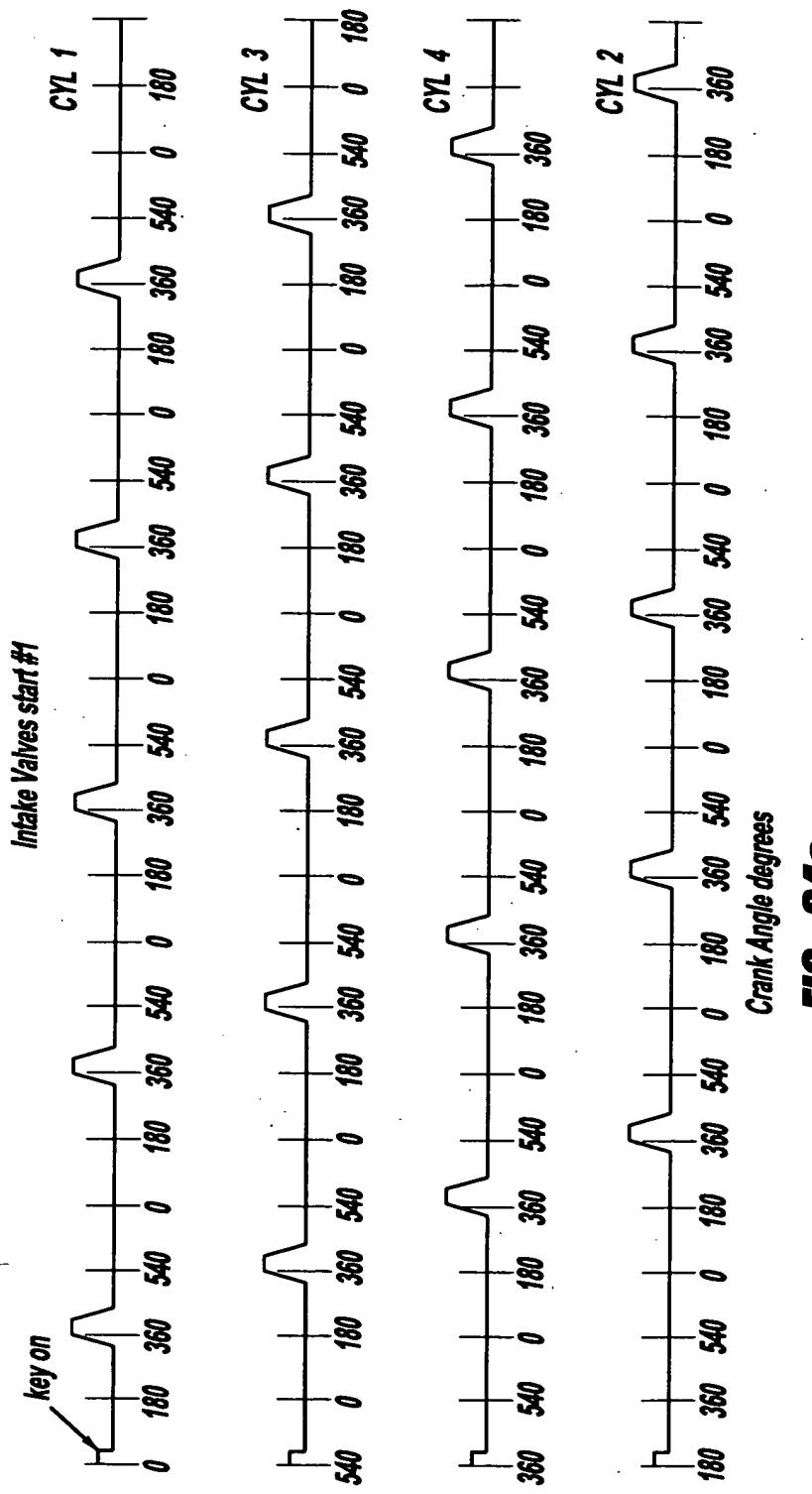
**FIG - 33a**

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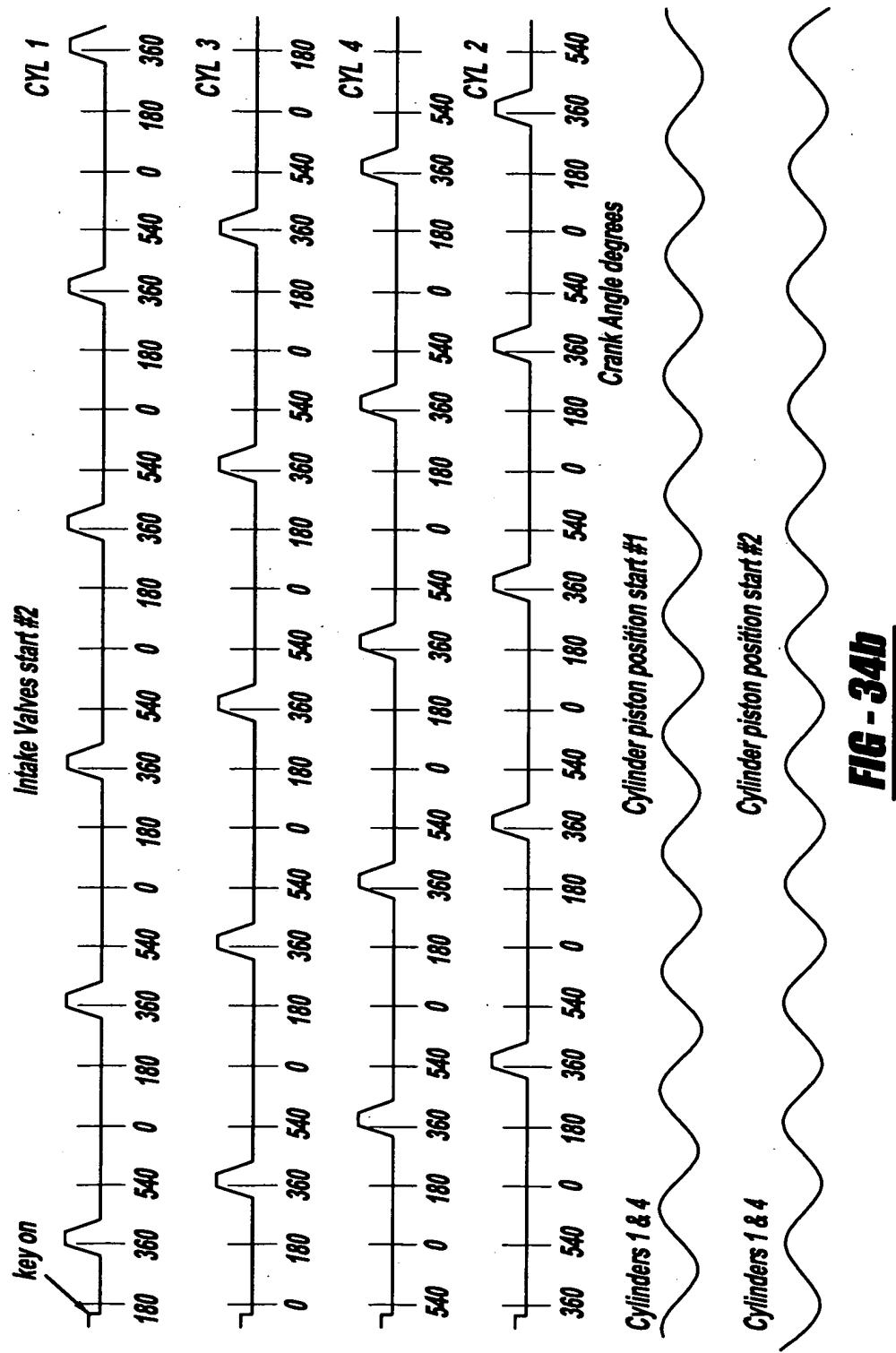
**FIG - 33b**

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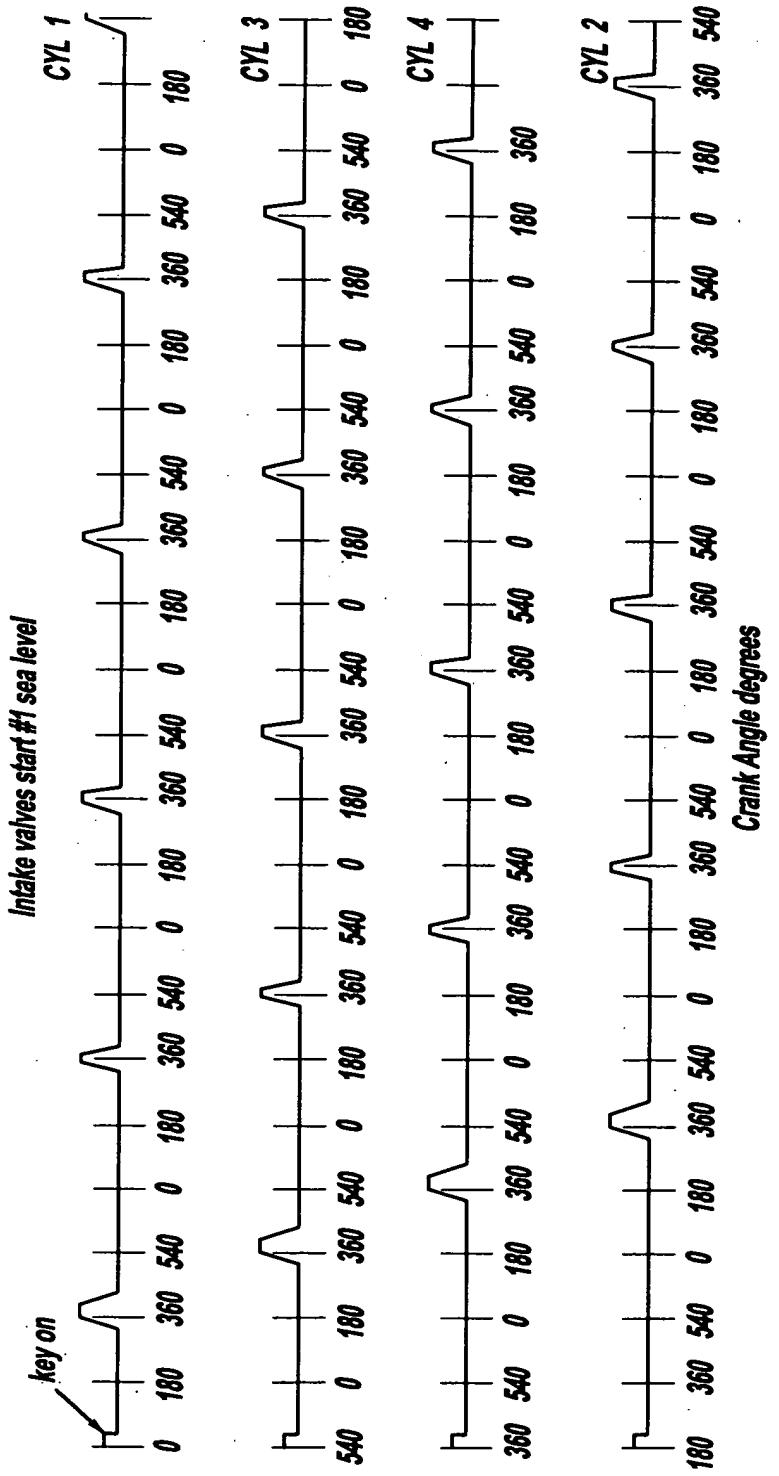
**FIG - 34a**

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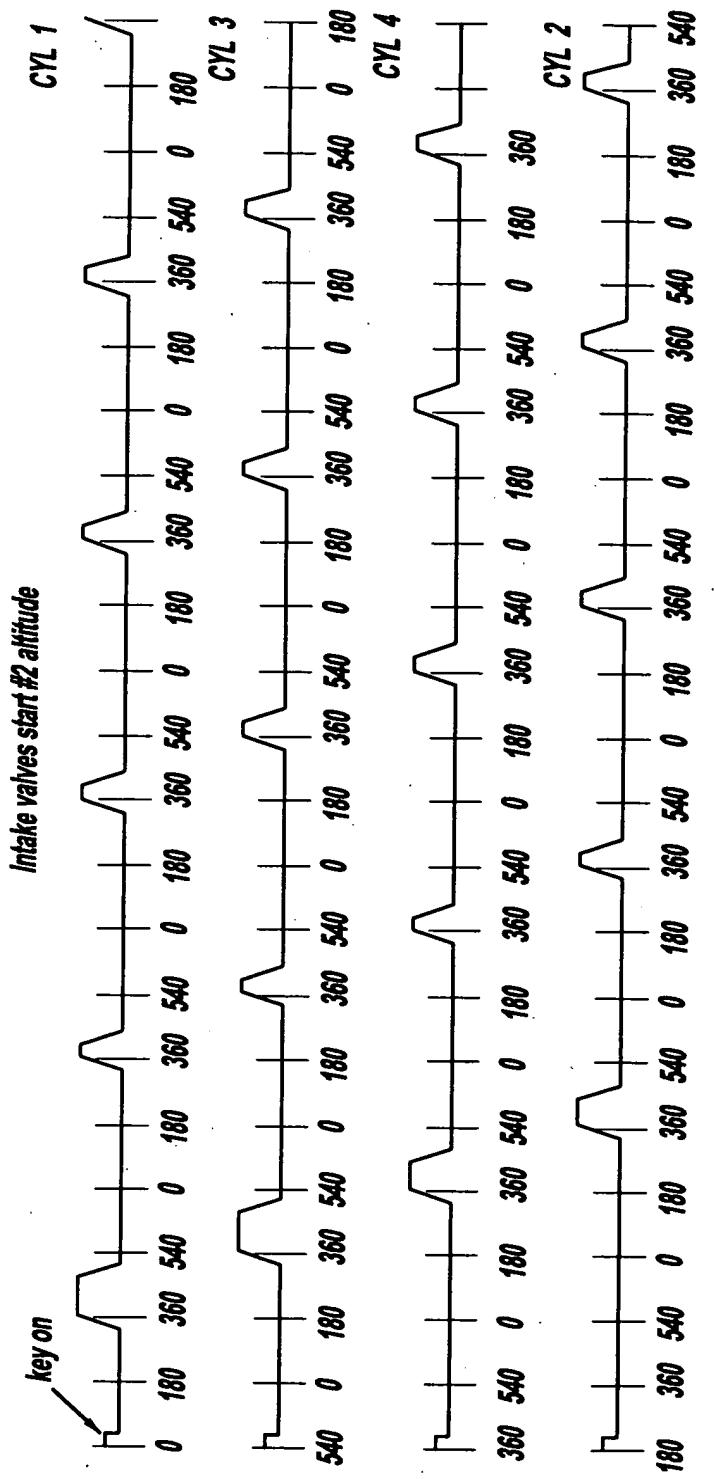
**FIG - 34b**

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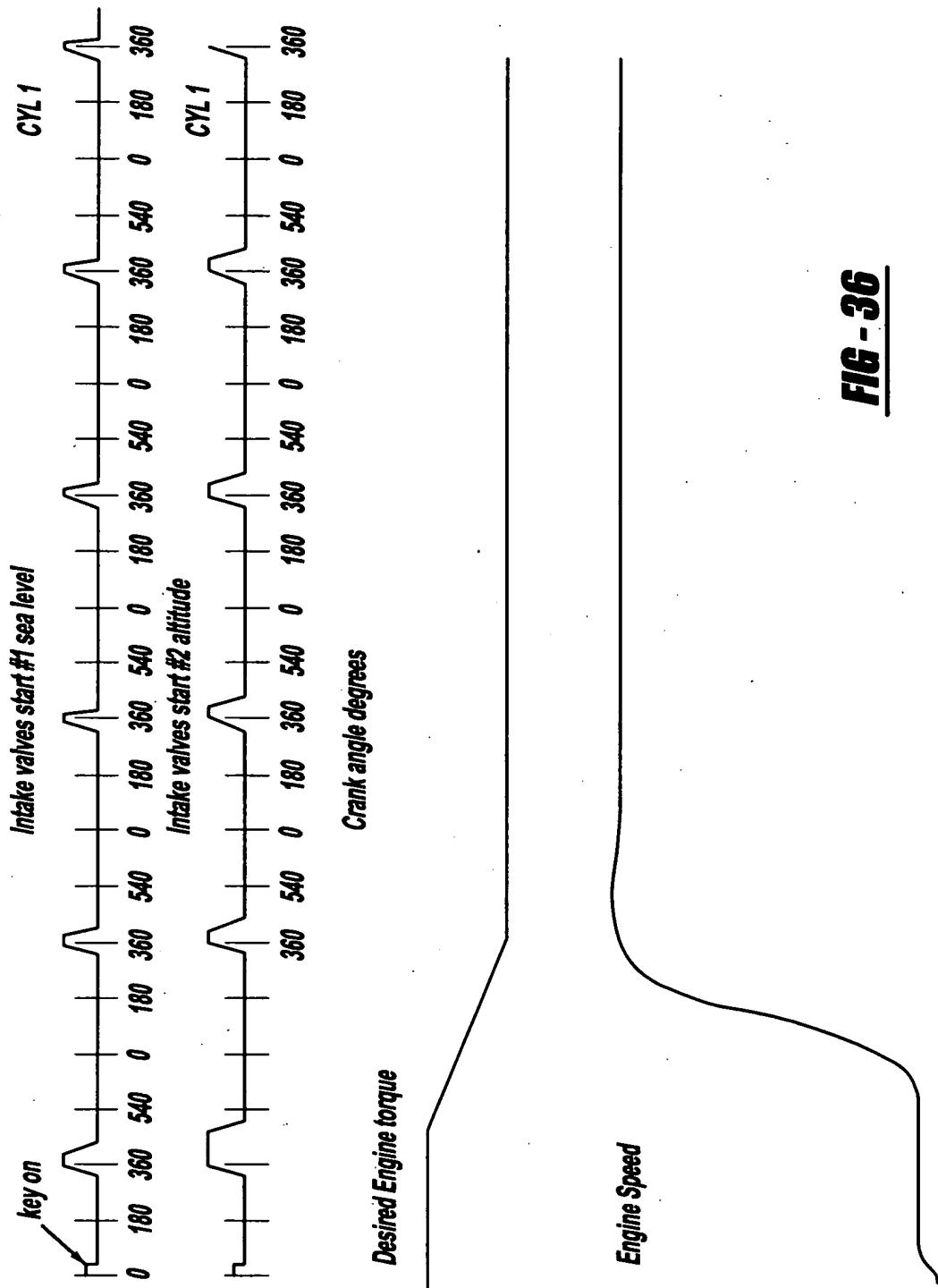


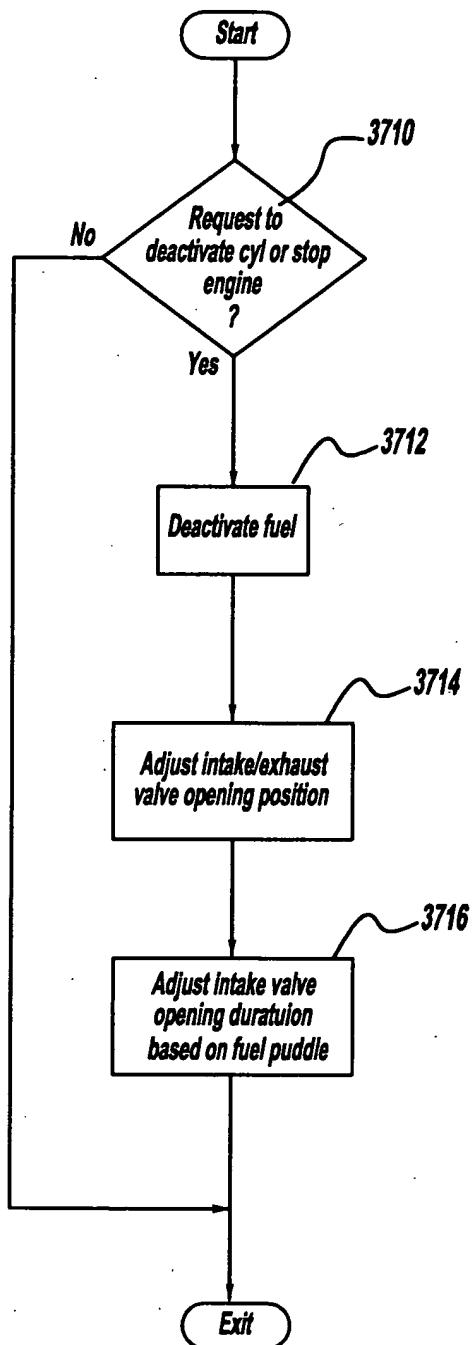
**FIG - 35a**

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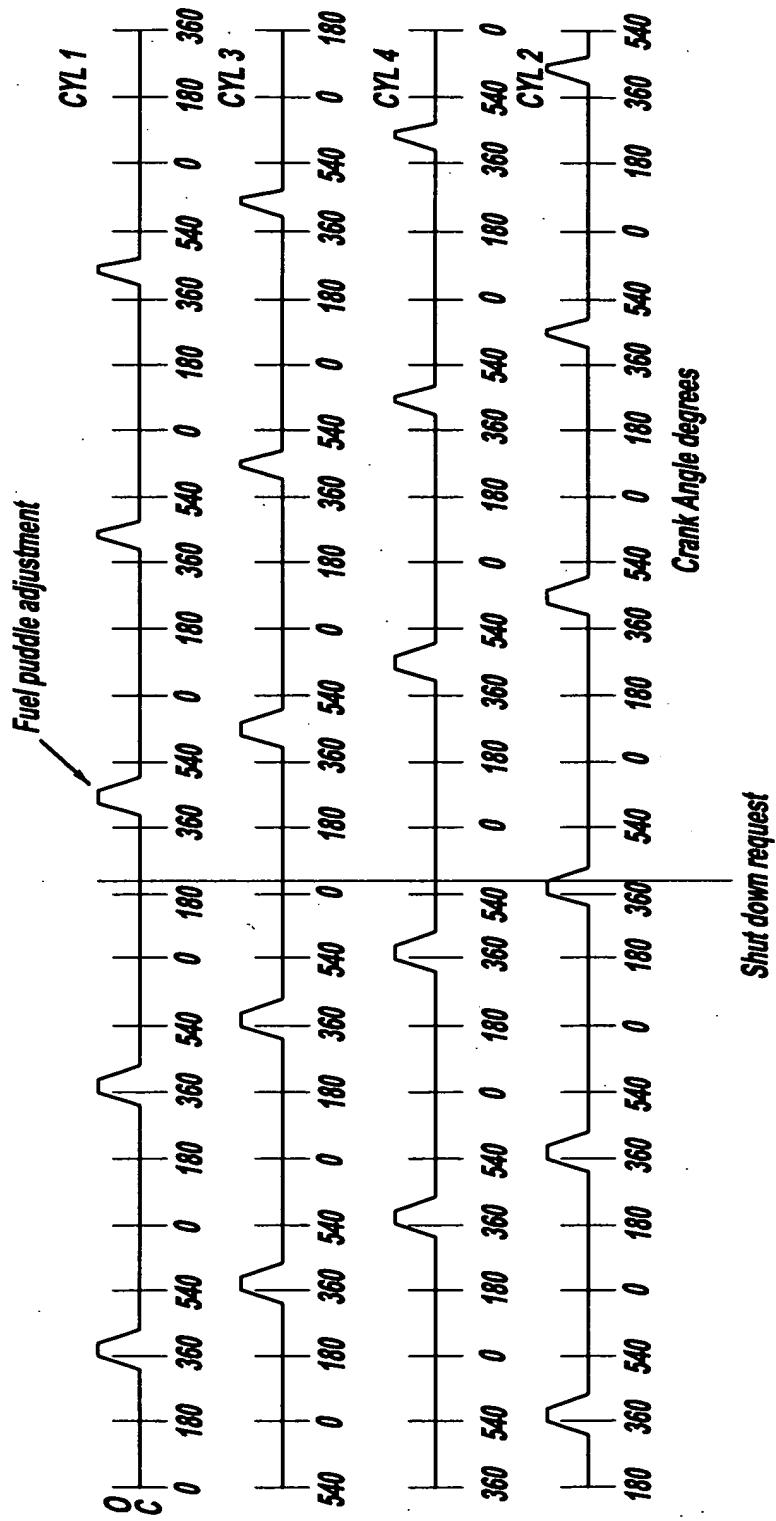


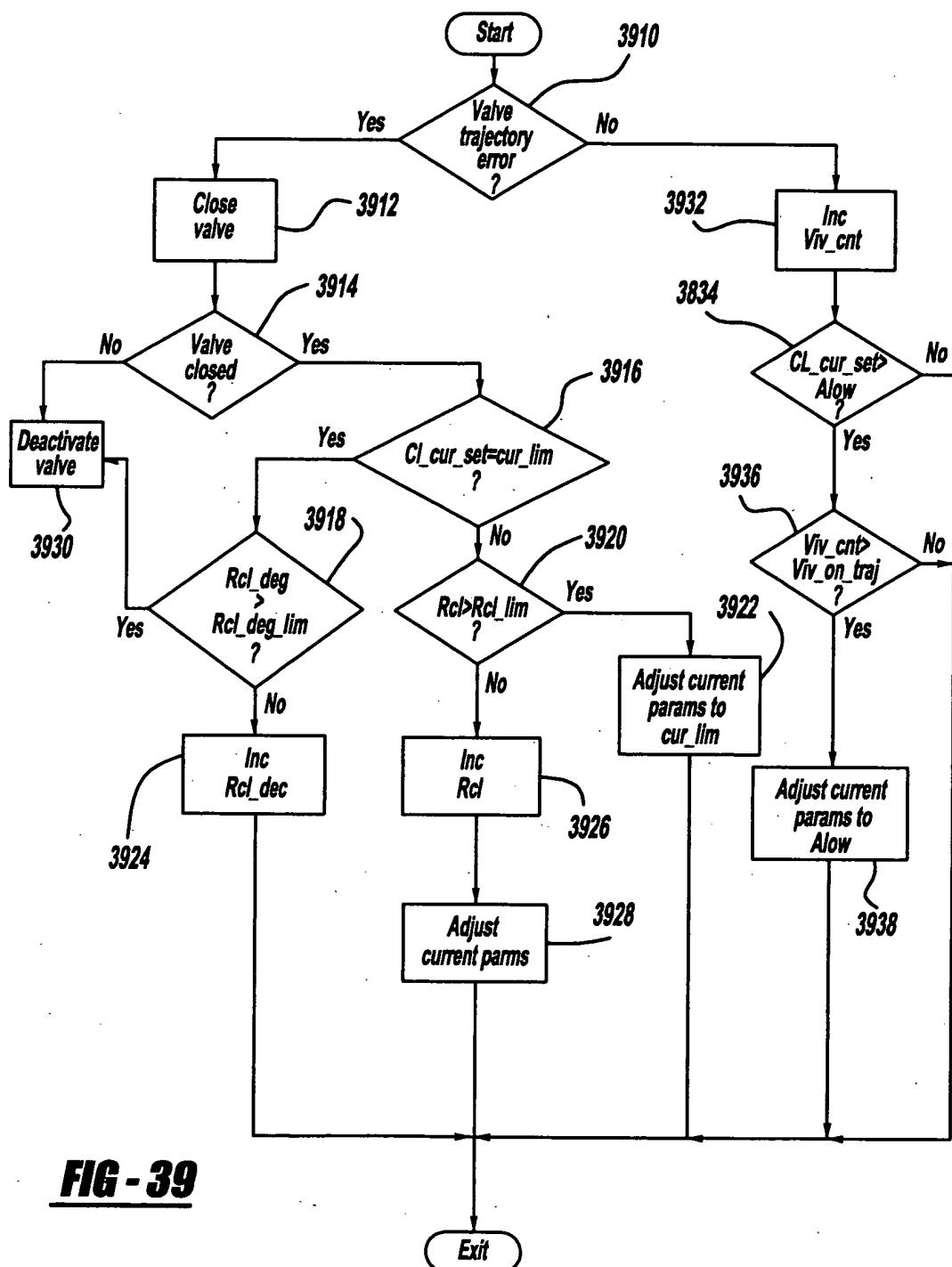
**FIG - 35h**

FIG - 36

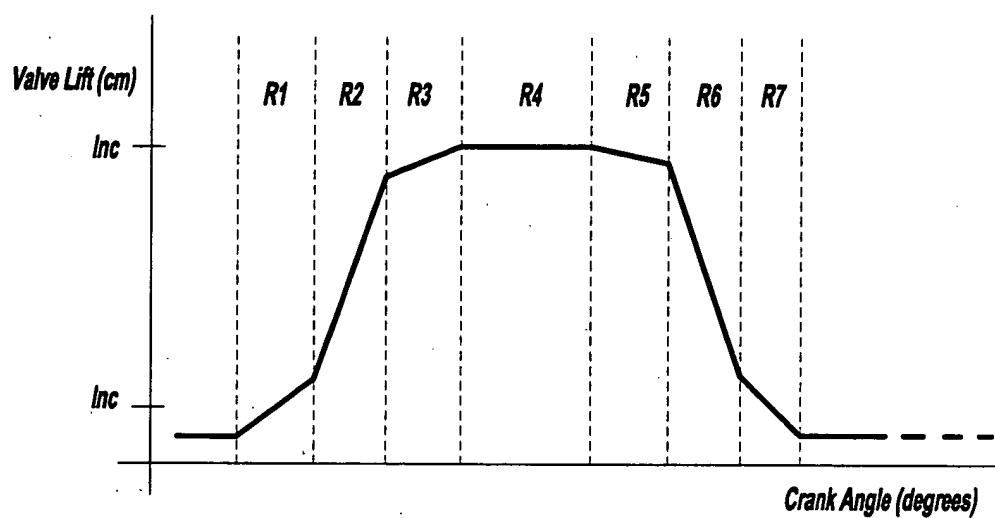


**FIG - 37**

*Intake valve timing during engine shut down***FIG - 38**

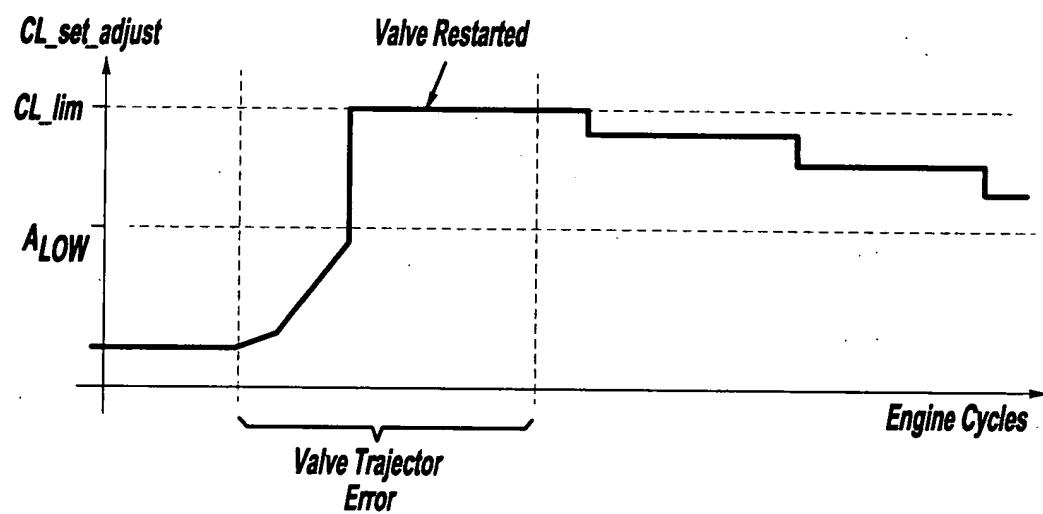


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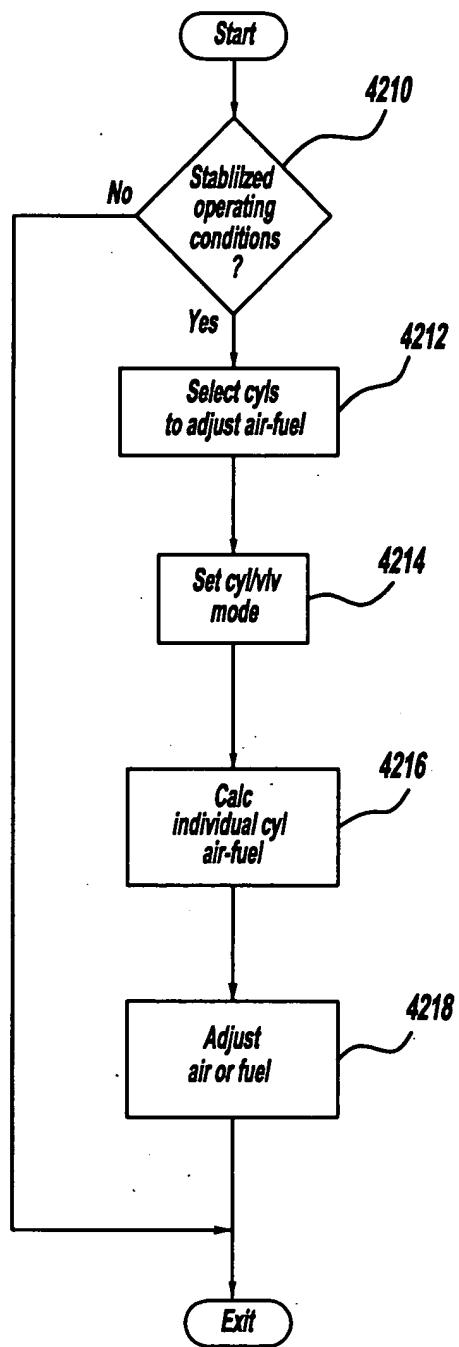


**FIG - 40**

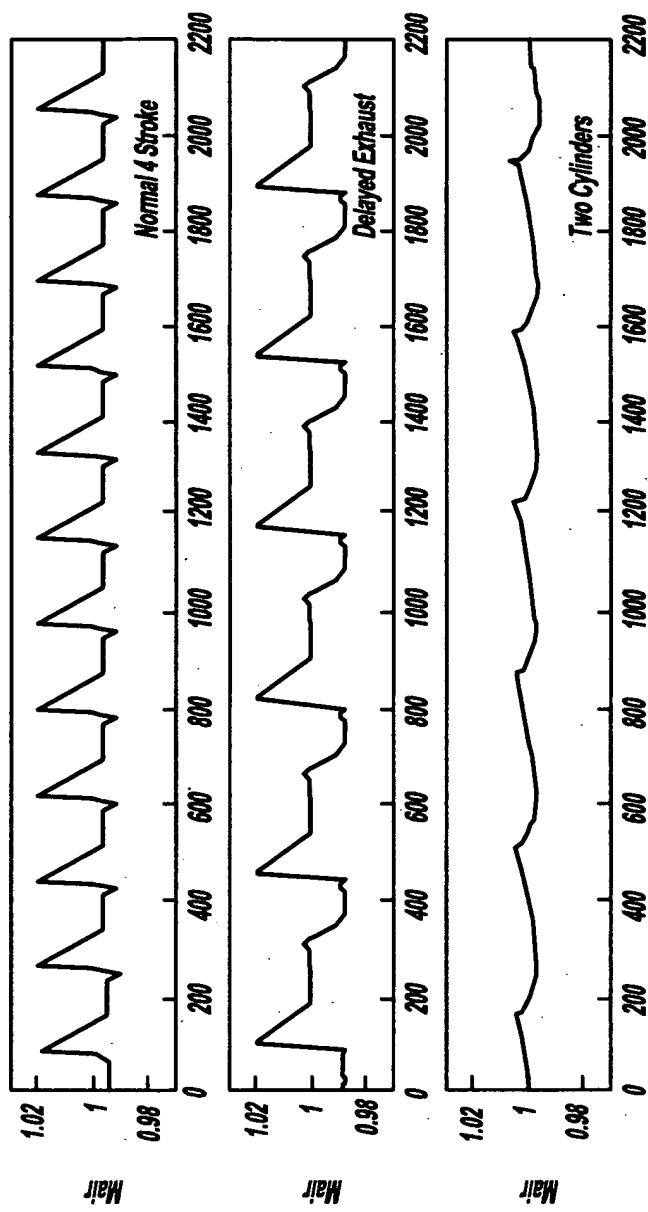
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**FIG - 41**

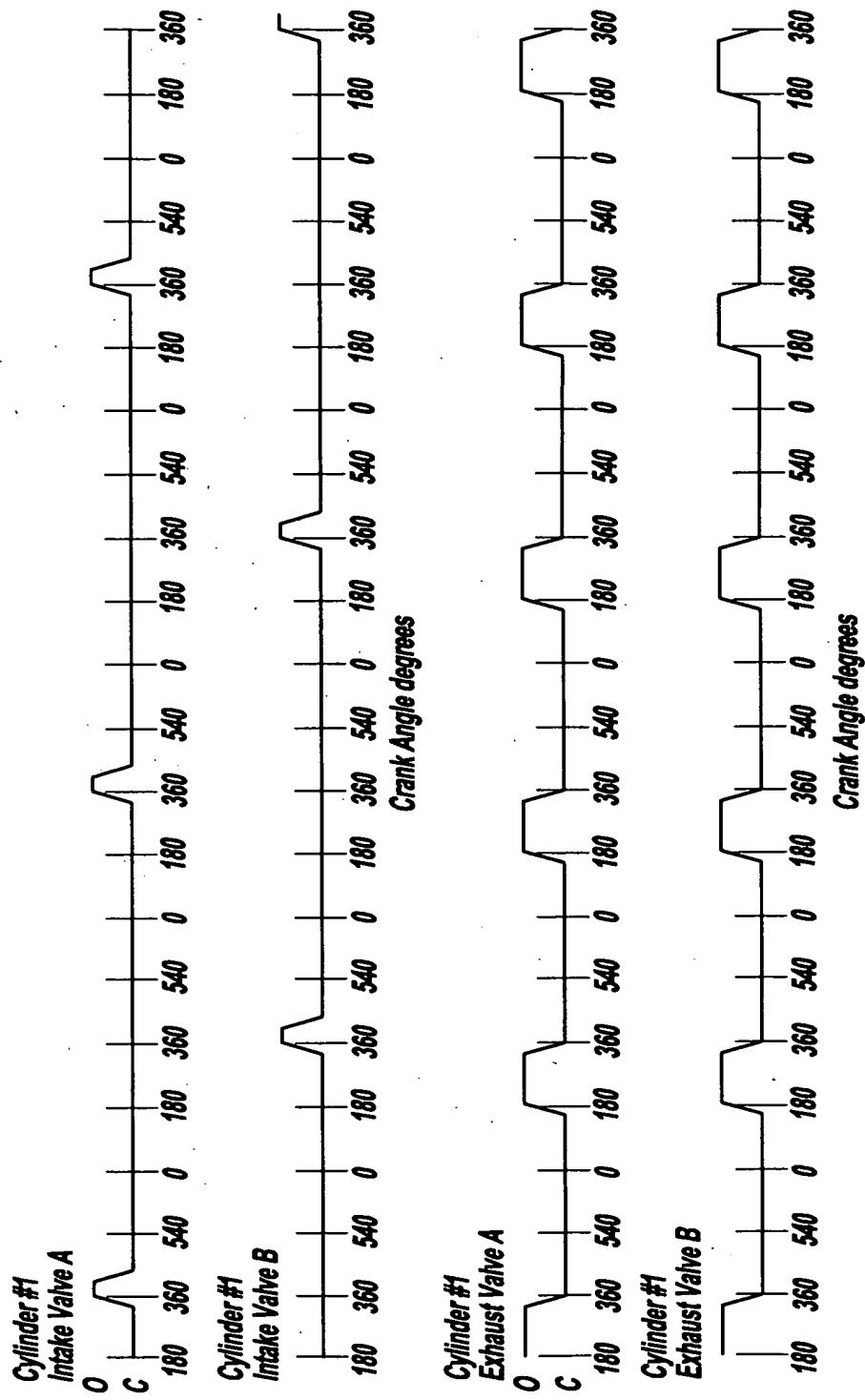


**FIG - 42**

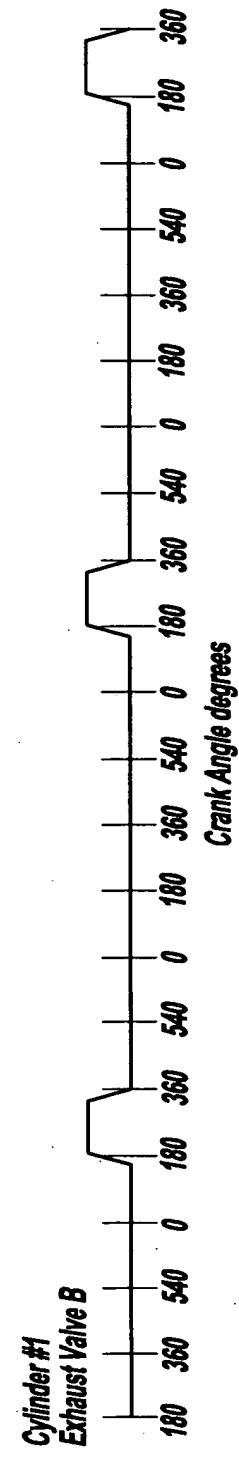
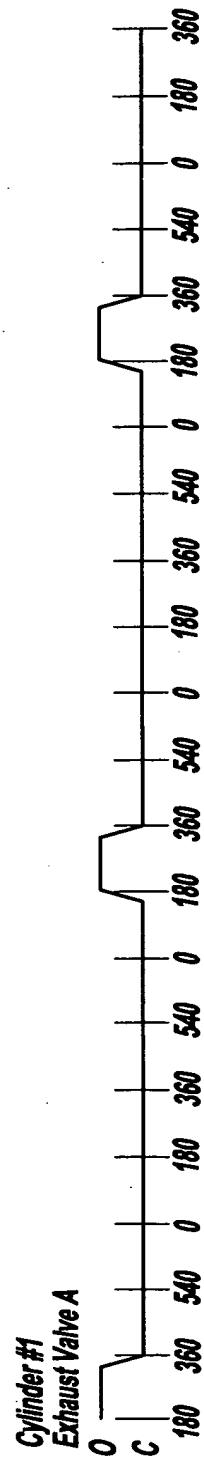
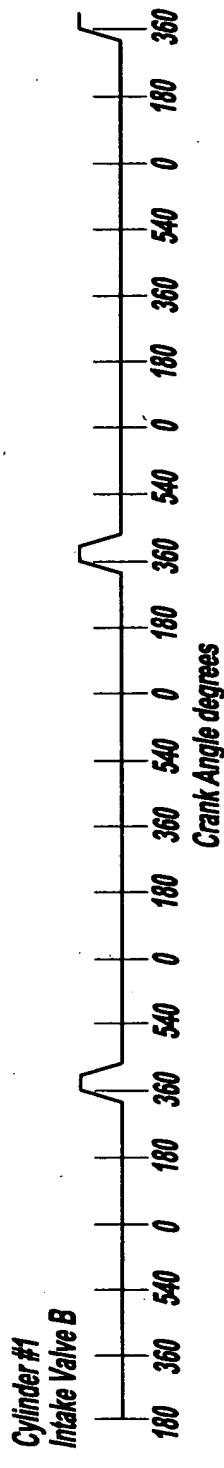
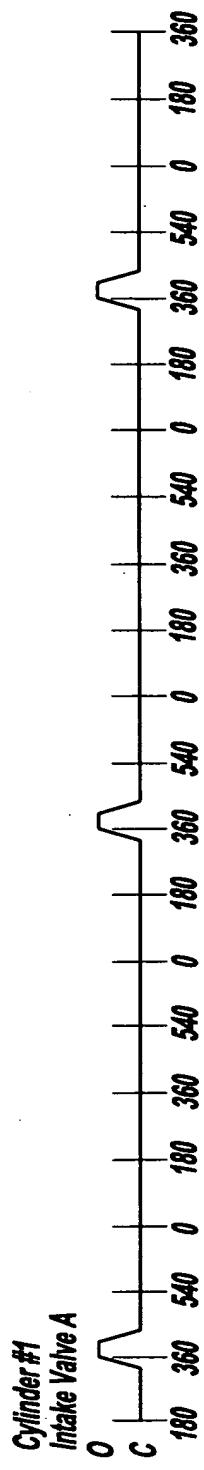


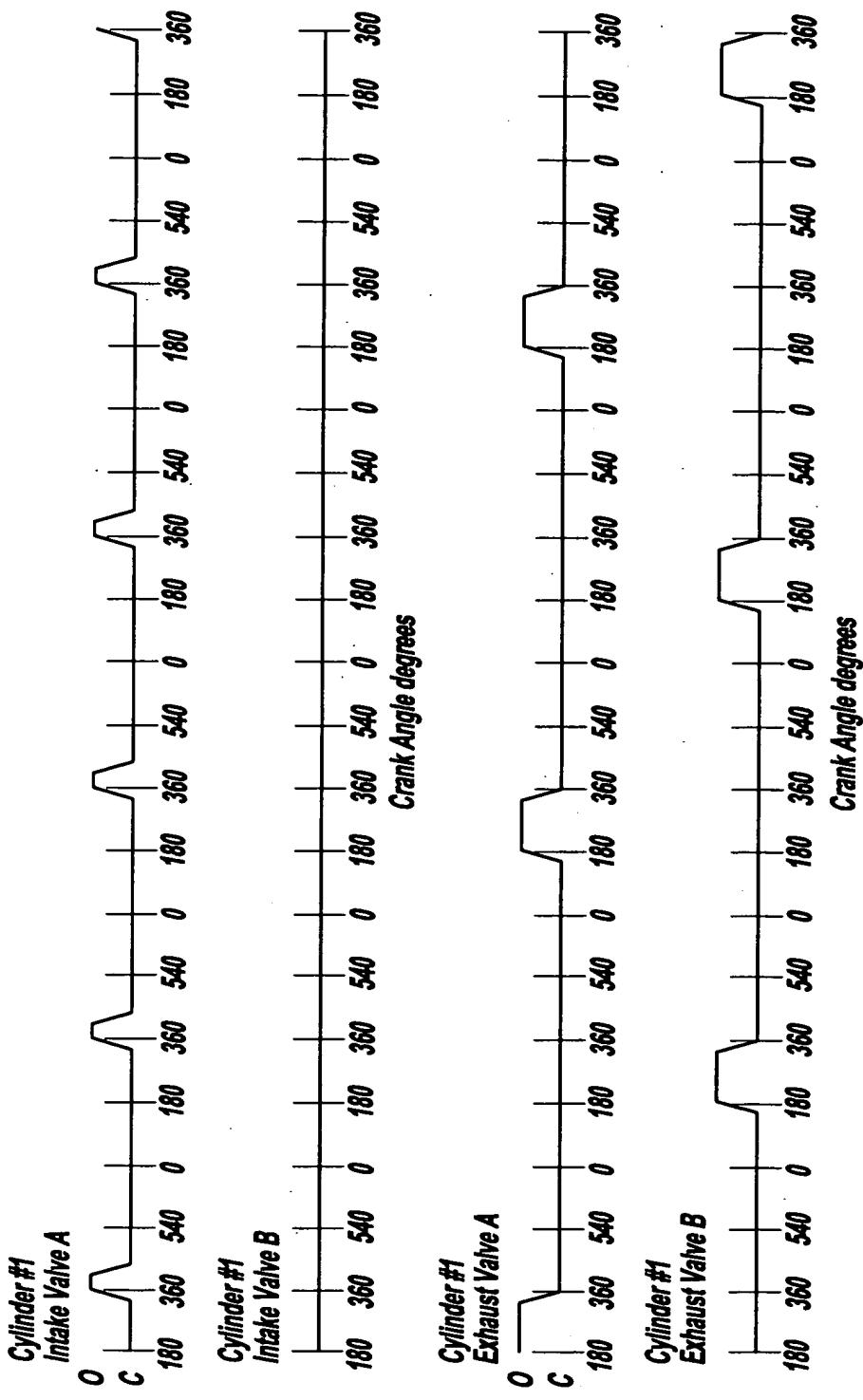
**FIG - 43**

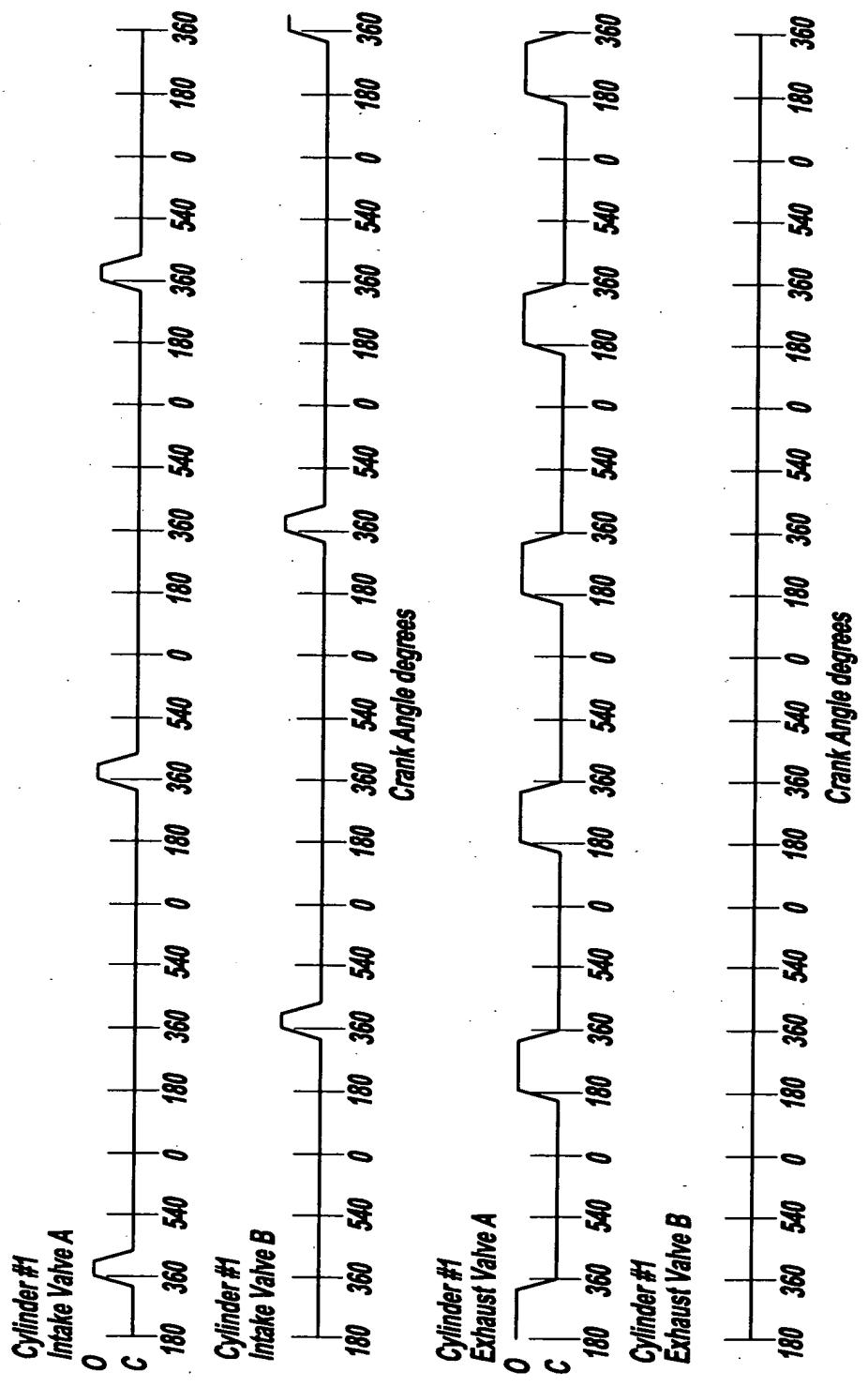
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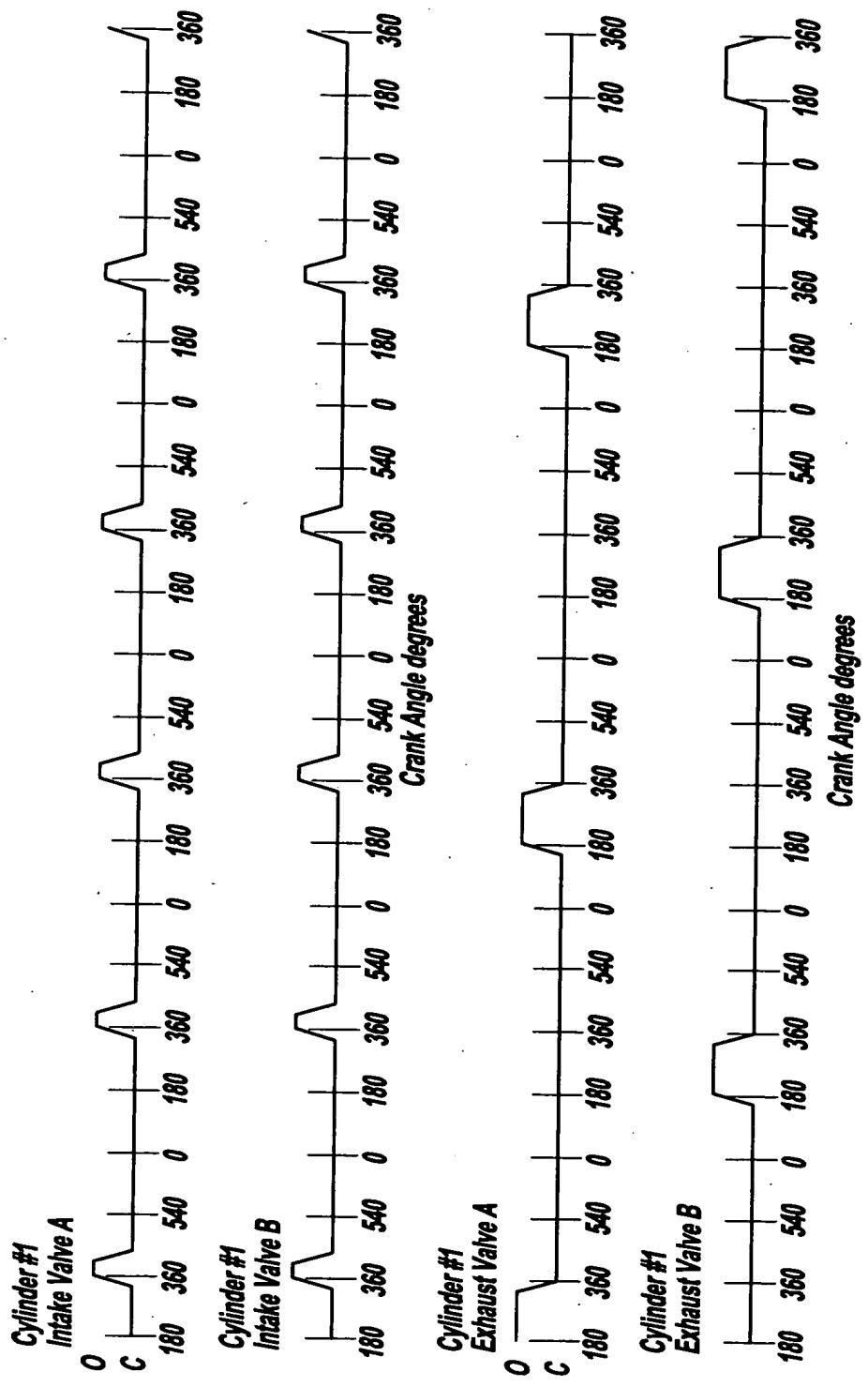


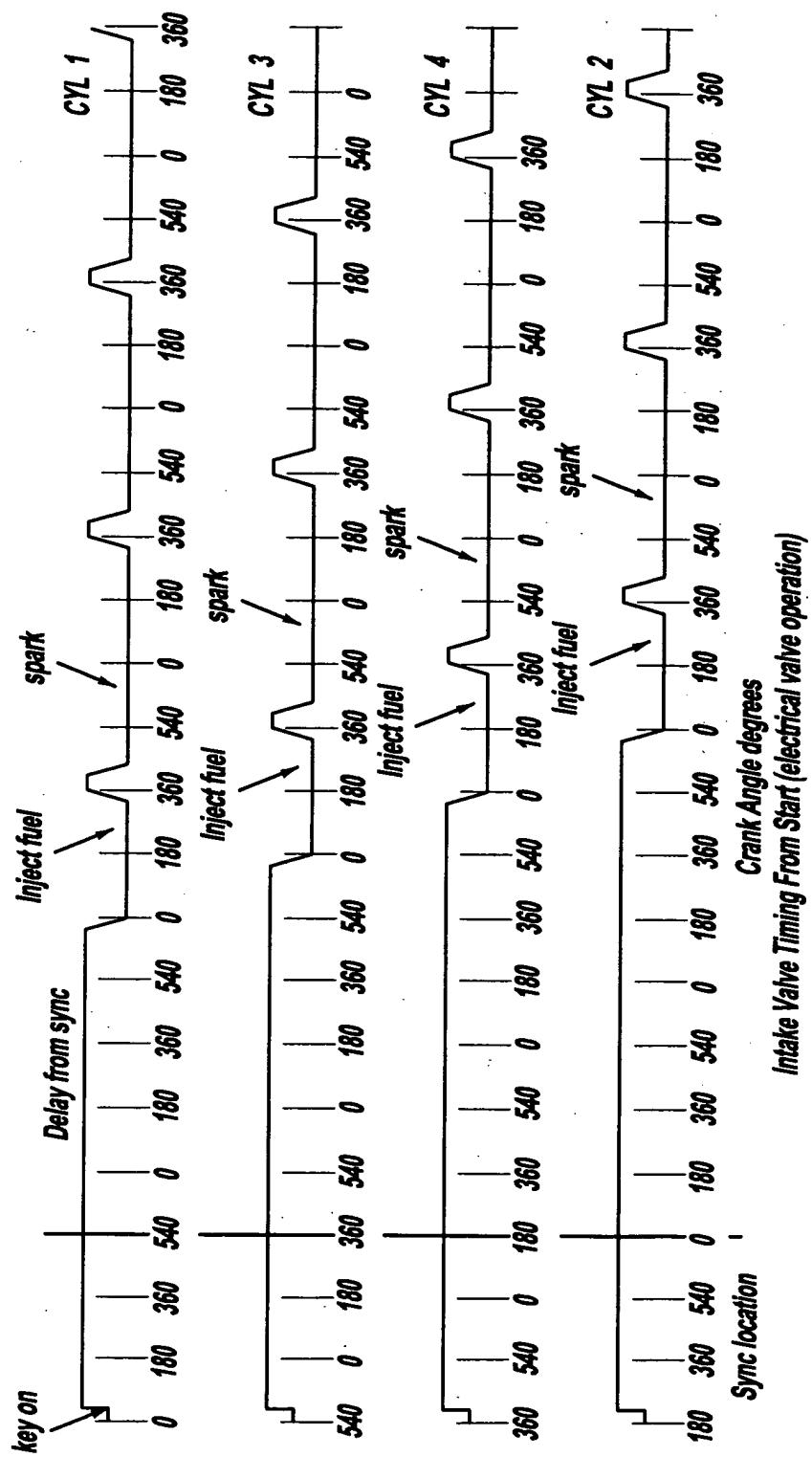
**FIG - 44**

**FIG - 45**

**FIG - 46**

**FIG - 47**

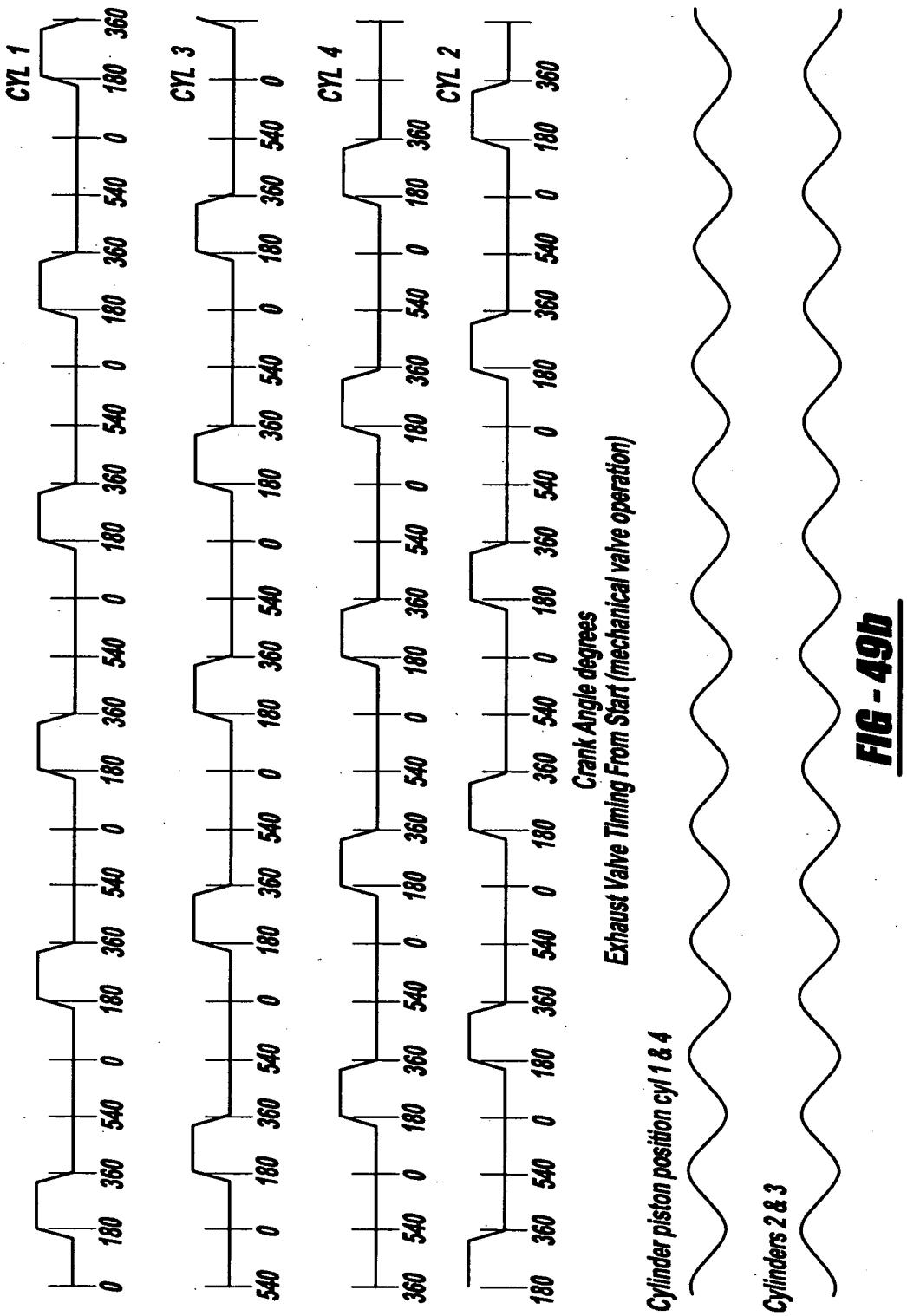
**FIG - 48**

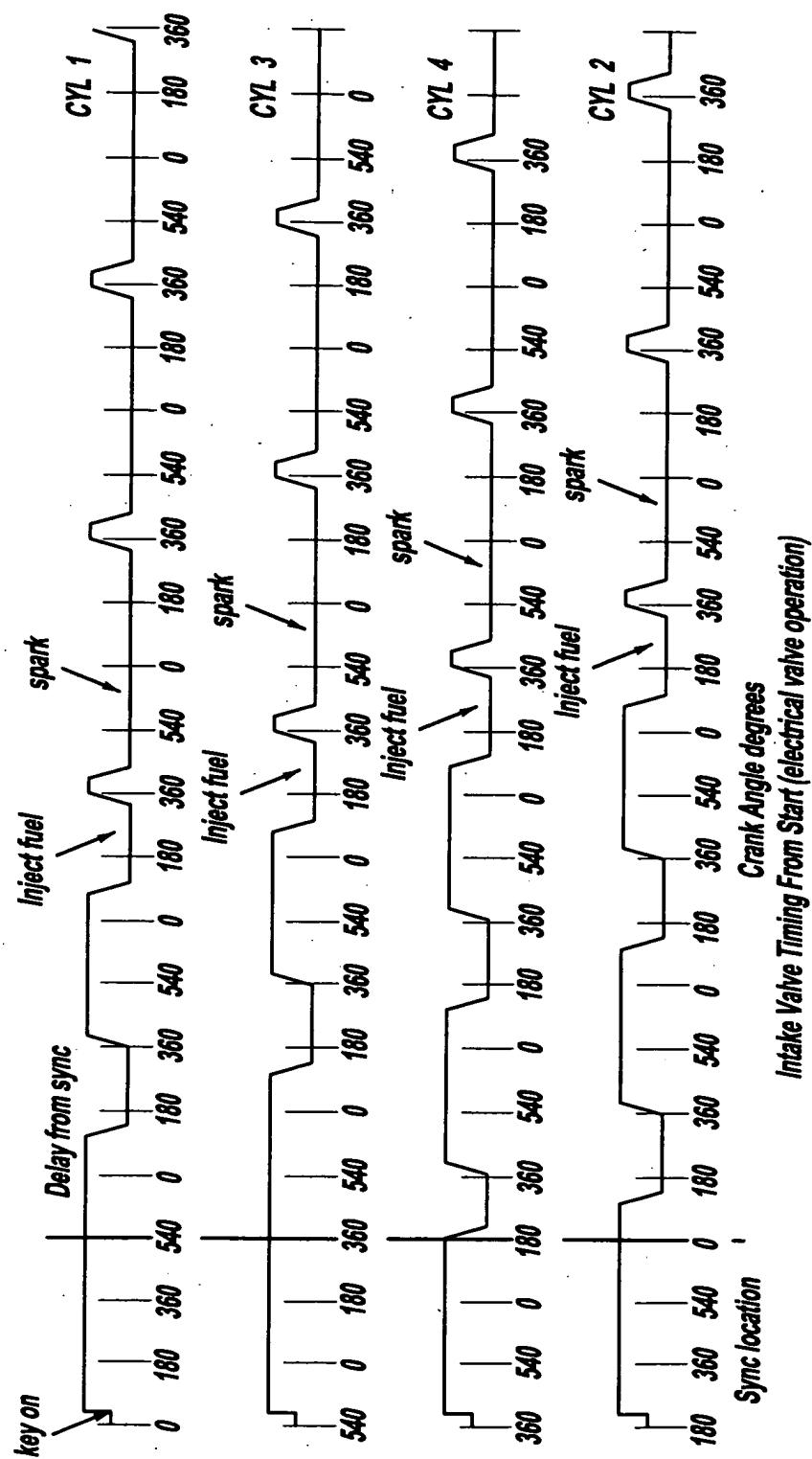


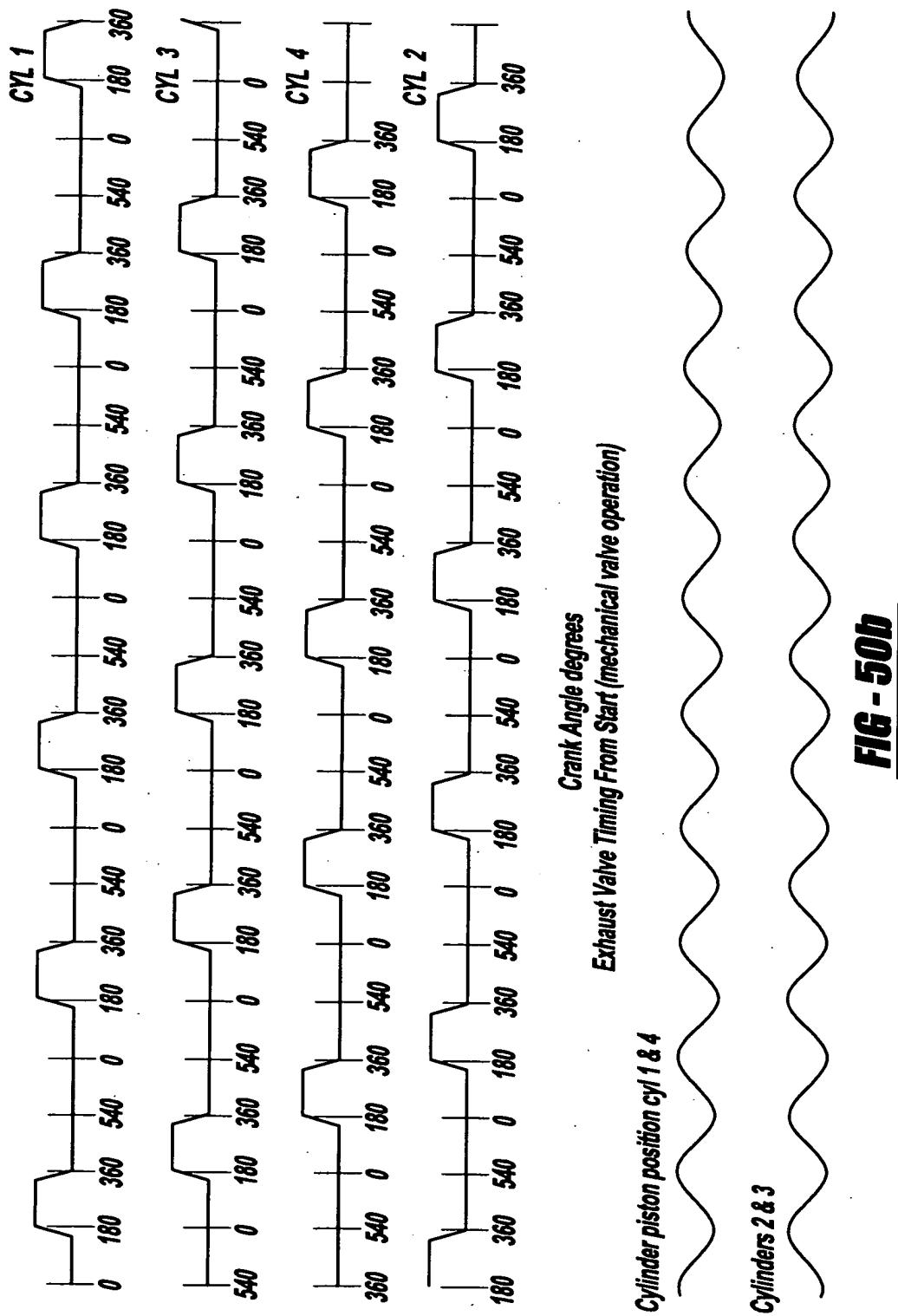
*Intake Valve Timing From Start (electrical valve operation)*

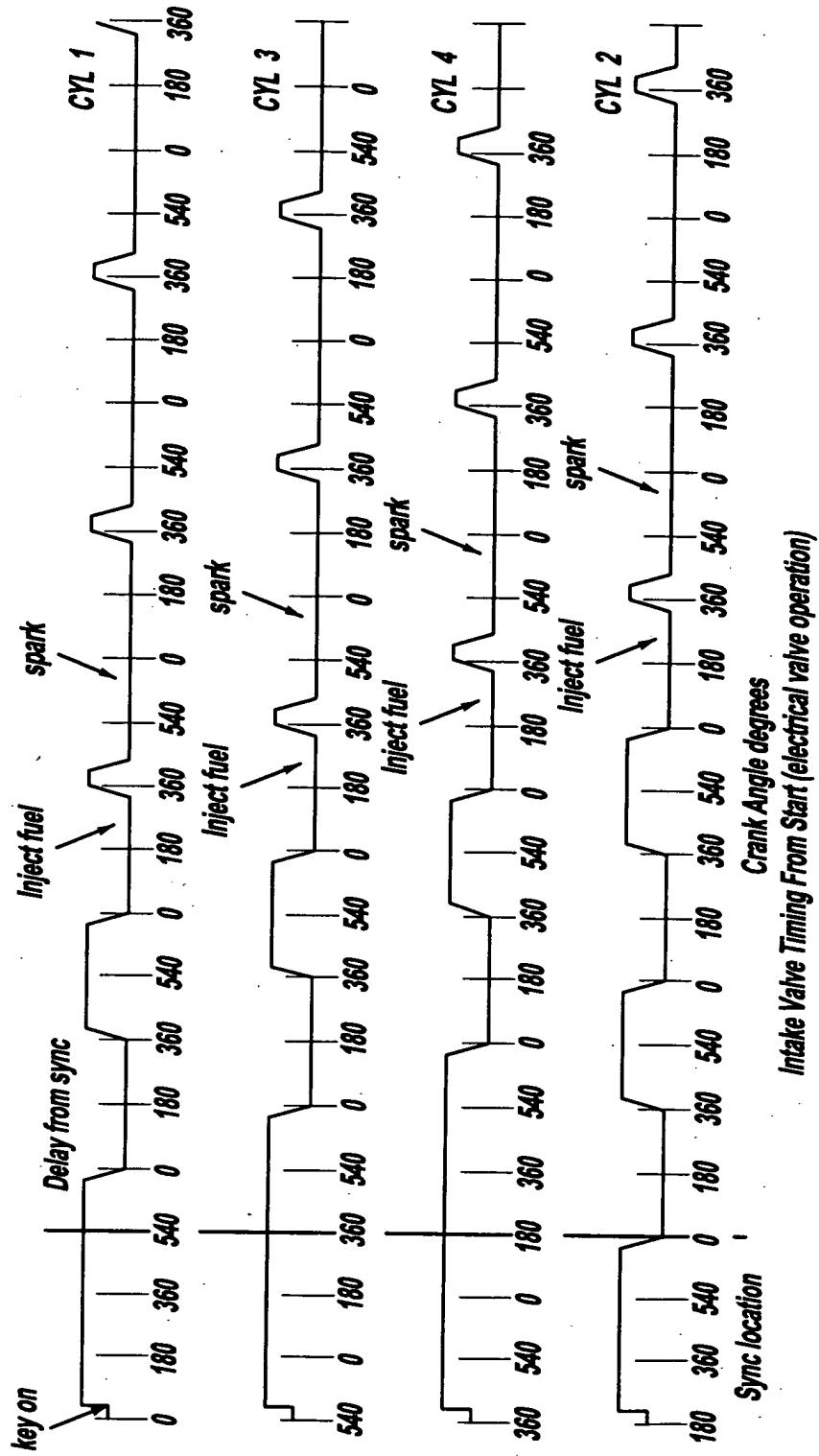
**FIG - 49a**

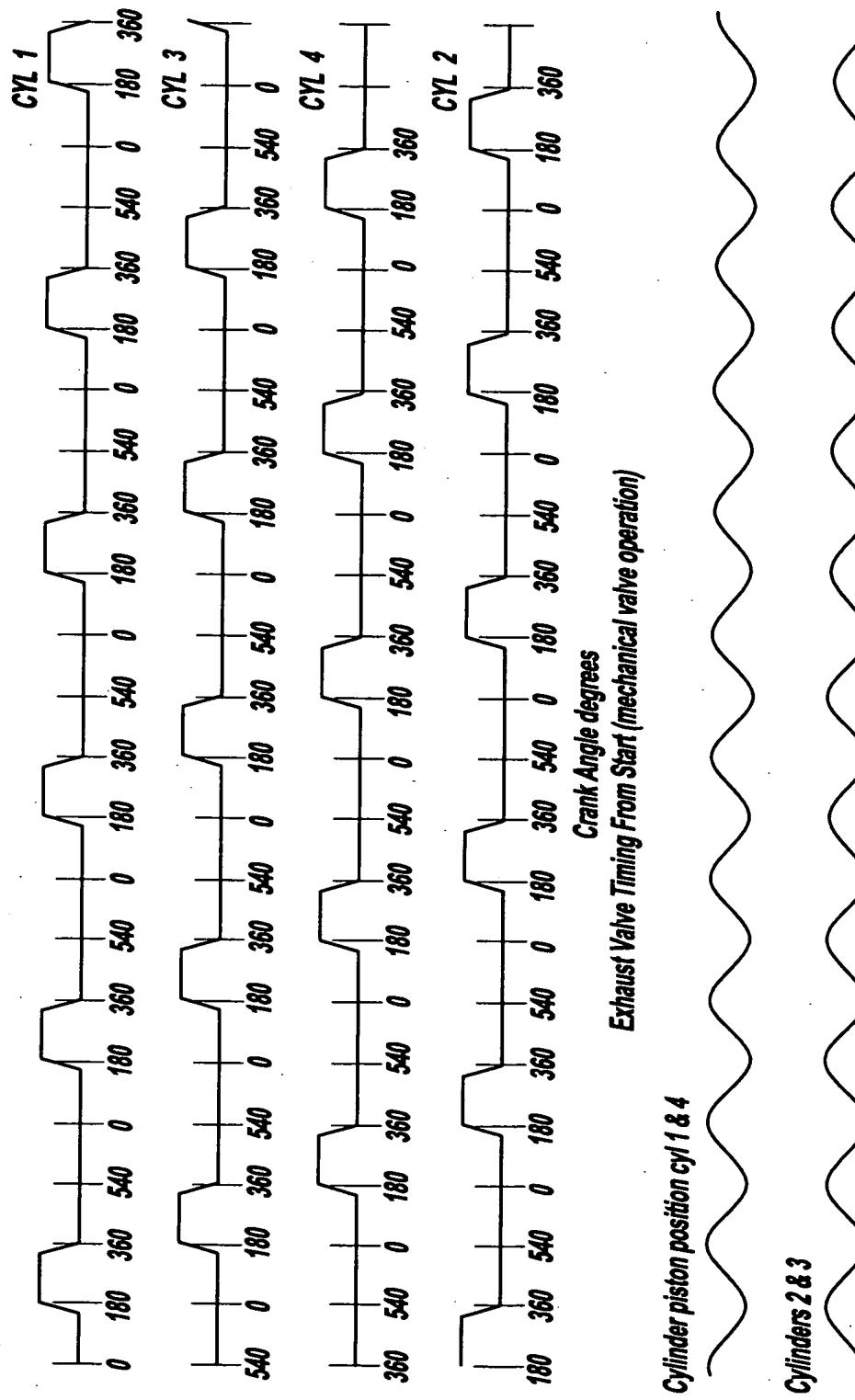
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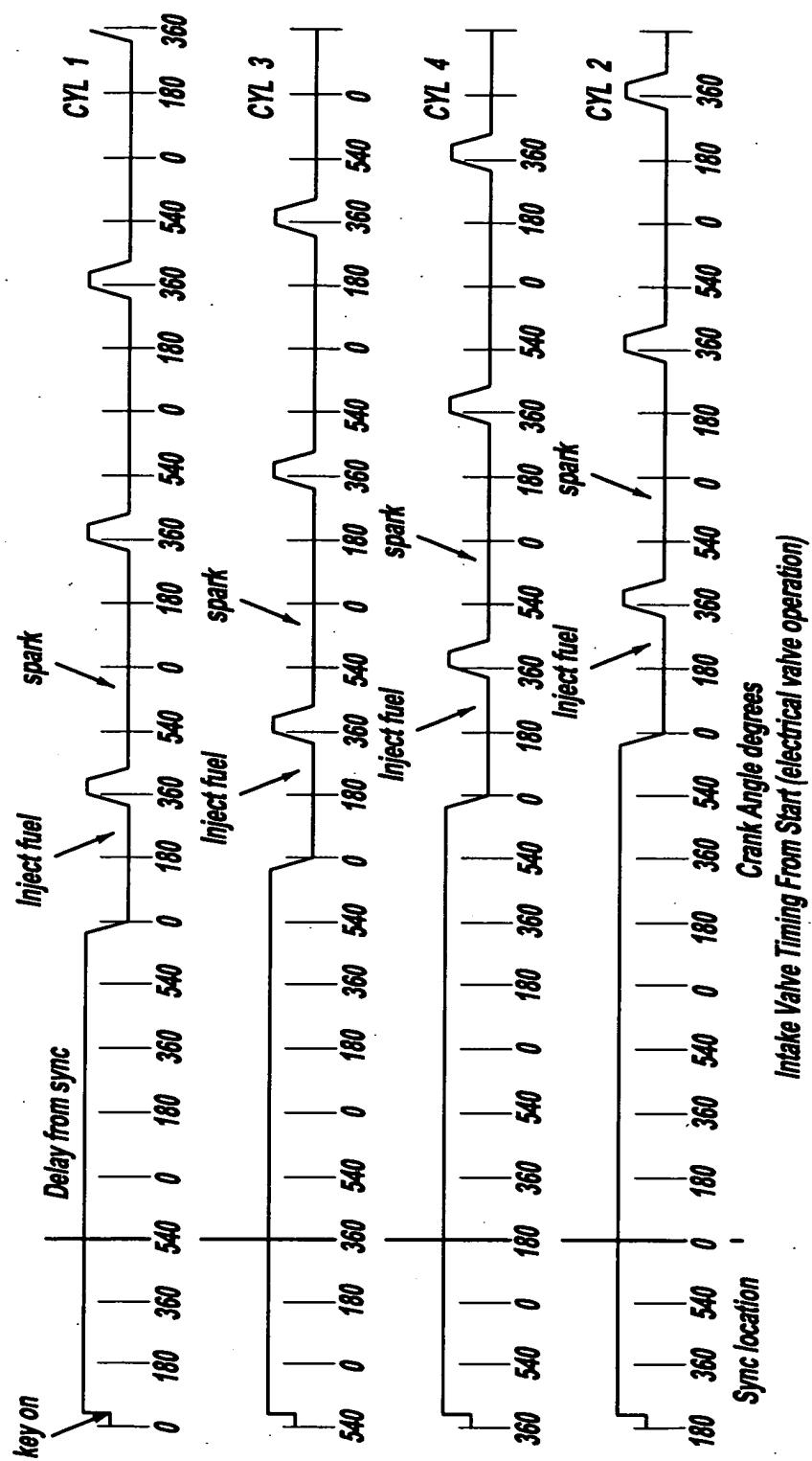
**FIG - 50a**



**FIG - 51a**



**FIG - 51b**



## *Intake Valve Timing From Start (electrical valve operation)*

FIG - 52a

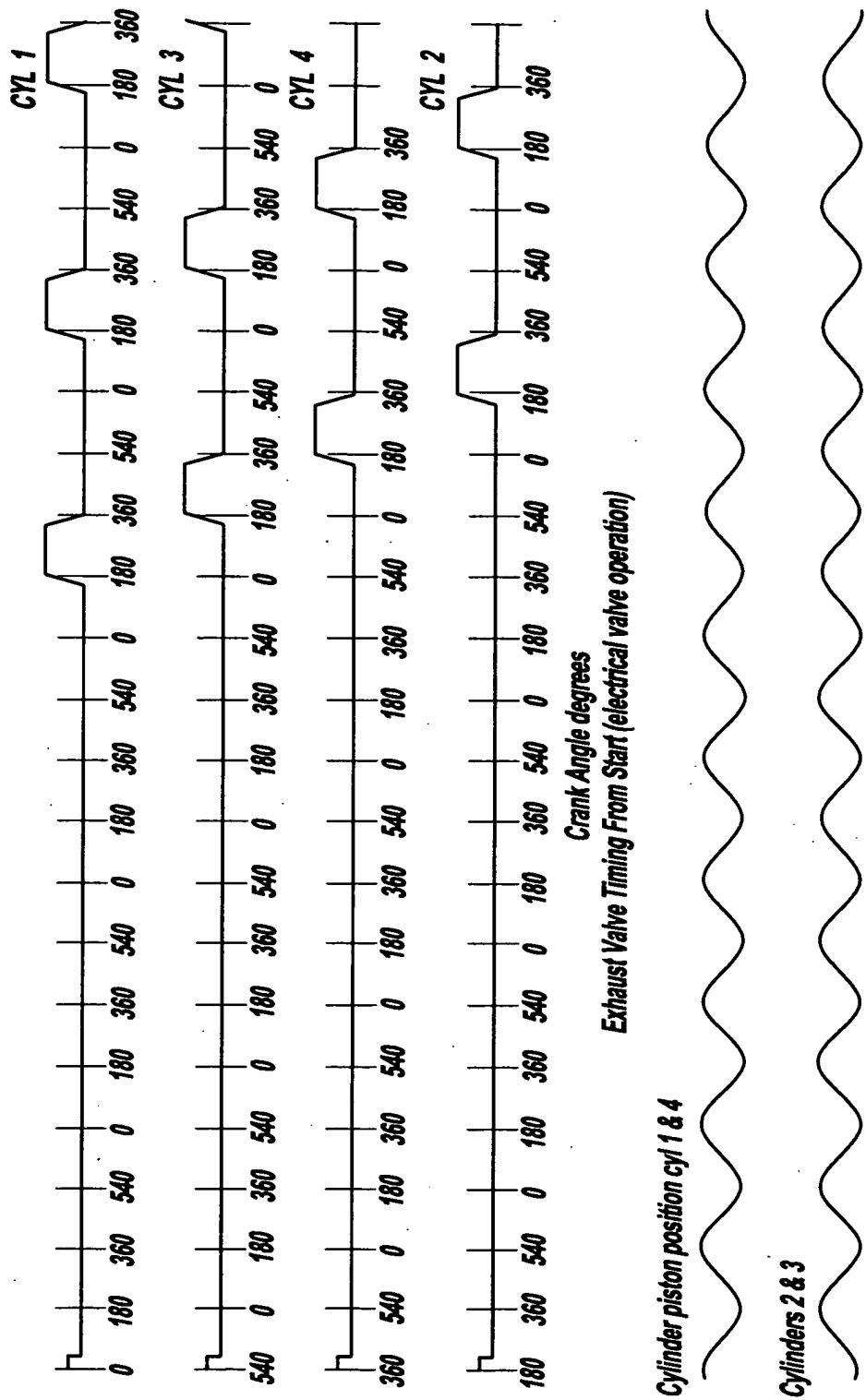
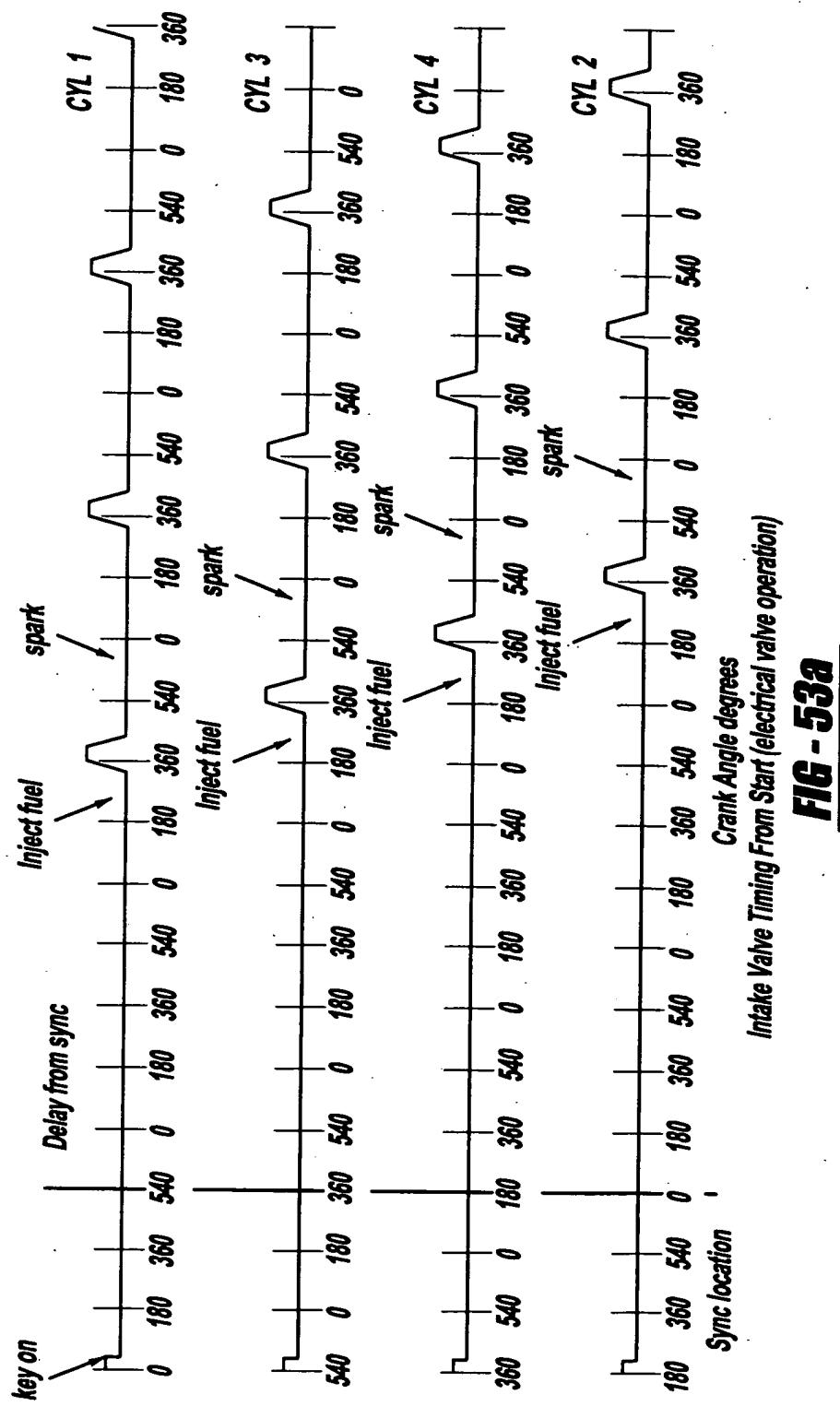
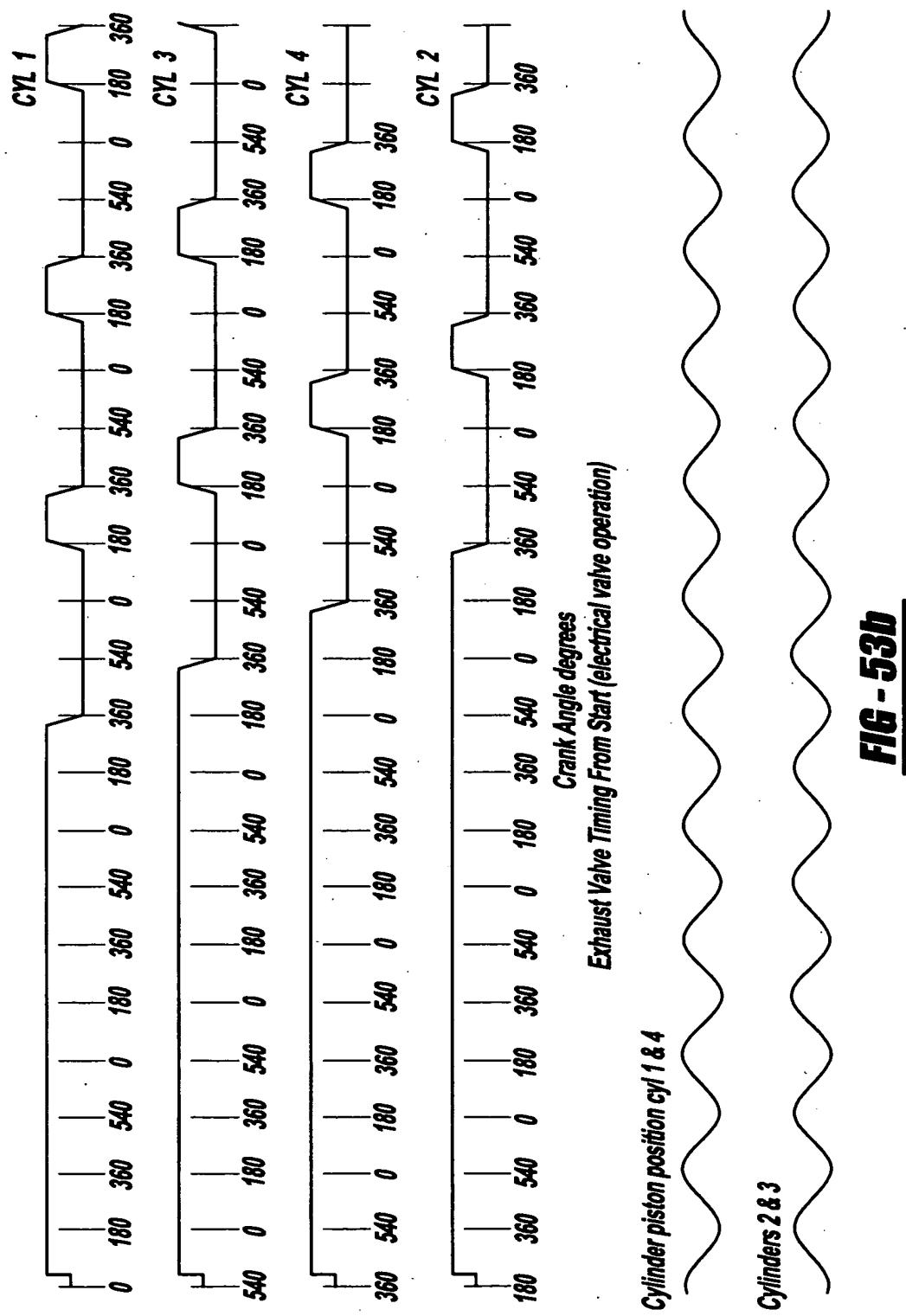


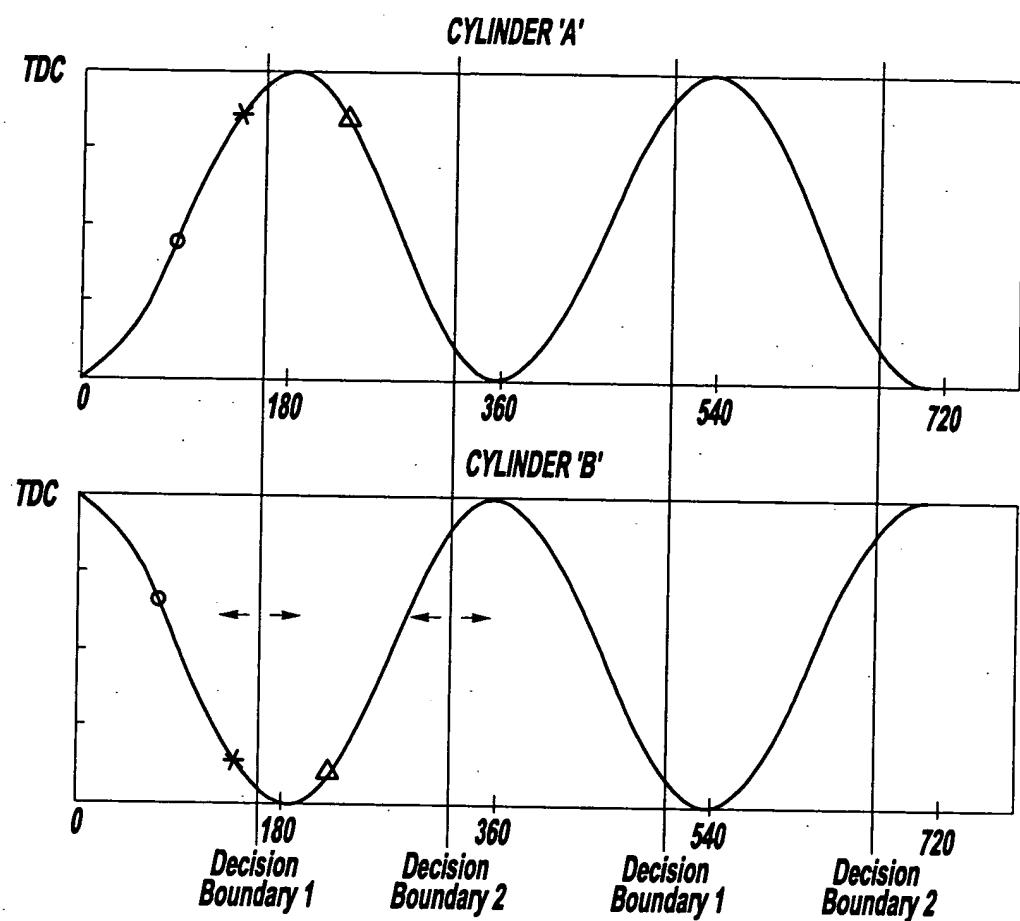
FIG - 52b

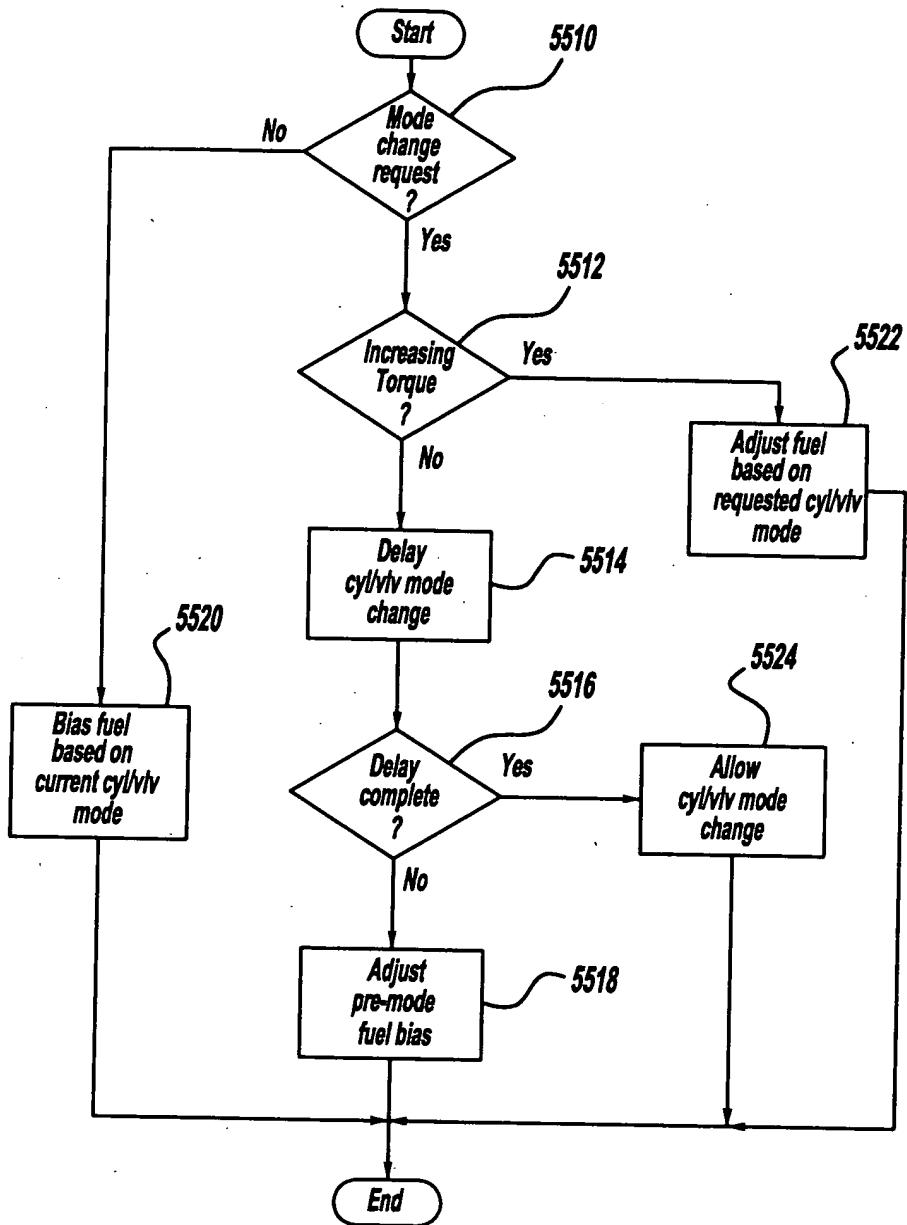
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**FIG - 53a**



**FIG - 54**

**FIG - 55**